

NOVEMBER 1959 40 CENTS

Consumer

BULLETIN

The Original Consumer Information Magazine
Testing and Reporting on Products since 1926

Television receivers

Tests of 17 new 1959 models

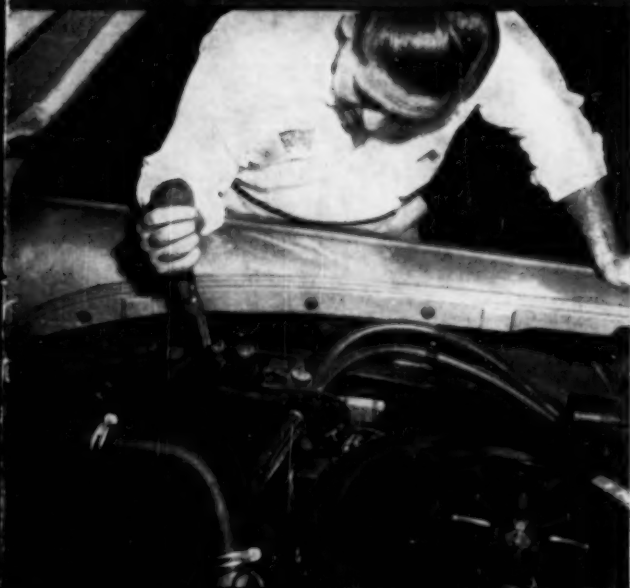
Buying your first diamond?

Toys recommended for Christmas



AUTO BATTERIES

ELECTRIC RANGES



Vibrate?

The ad-man's latest cure for
everything!

Food and Drug Law amended—

but leaves the consumer outside
looking in

Buying your first diamond?

BY VICTOR ARGENZIO

THIS YEAR more than half a million young men will make one of the most important purchases of their lifetime—a diamond engagement ring. Considering that the majority of men and women will buy a diamond at some time, it is surprising how few know much about diamonds, or know how greatly buyers are dependent on the persons who sell them.

Diamonds are pure carbon in a crystalline form, resulting from millions of years of the earth's heat and pressure. They are the hardest of all minerals, and, when properly cut and polished, possess unsurpassed beauty and brilliance.

Diamonds, like most other commodities, may be obtained in a great variety of qualities and prices to suit your taste and pocketbook. During the past few years the average purchase price of diamonds, in this country, was from two to three hundred dollars, and you can buy a very nice ring for that amount of money.

Diamonds are measured by weight, in carats (1/142nd of an avoirdupois ounce), and a carat is divided into 100 points, according to present terminology. A half carat, then, will weigh 50 points; a fourth of a carat, 25 points, etc. The average size diamond purchased is about one third of a carat.

This is important to remember: the larger the diamond, the scarcer, and the higher the price per carat. A one-carat diamond is worth much more than two stones weighing a half carat each, providing the qualities are alike. Likewise, a half-carat stone is worth more than two weighing a quarter carat each. So, when an advertisement reads 1/3 carat for a certain price, be sure to find out if the weight refers to the center diamond, or does it refer, as it too often does, to the combined weight of the diamonds in the engagement ring, and often to the diamonds in the wedding ring as well. The difference is important. Be sure to obtain the exact size of the *center diamond*, as that is where your money goes principally, since the small stones are worth much less per carat.

While diamonds are sold by weight, the weight alone does not determine the value. Other properties, or lack of them, also affect the value greatly.

First comes the important question of clarity. This means the quality of the stone from the standpoint of relative absence of flaws or imper-

fections. Nearly all diamonds have a flaw or flaws of some kind. This doesn't mean that they are not valuable. The rule is, the fewer and smaller the flaws or inclusions, the more valuable the diamond. Remember that a black inclusion is less desirable than a white blemish, such as a "cloud" or "feather."

The location of the inclusions is important. One that is in or near the center lessens the value of the stone more than one at the side or in the lower part of the stone where it is not so evident. Today's scarcity of fine quality diamonds has brought into the market stones which have flaws in the form of black spots, cracks, and other impurities readily seen by the naked eye. These are the least desirable to buy from the standpoint of beauty and market value. (See illustration on page 27.)

Is it better to buy a completely flawless diamond or one with one or more inclusions? That de-



Average size of diamonds of weights indicated, in properly proportioned stones. A one-carat stone, of course, will appear to be much less than twice as large as a one-half-carat stone. Diamonds are measured by weight in carats and not by lineal measure

pends. For the same price, a flawless stone will be smaller than one with inclusions. And size, of course, is important to many. On the other hand, there will always be those who want nothing but the finest, even if that requires their being satisfied with a smaller size.

On the whole, considering that very few diamonds are entirely flawless, you need not be disturbed by the presence of a flaw or flaws, provided they are not obvious enough to detract from the beauty of the stone.

What is meant by "perfect cut"? This should refer to the cutting of the stone only, and does not relate to the clarity or color. The quality of the cut depends on the skill of the individual cut-

(Continued on page 27)

The Consumers' Observation Post

HAS YOUR TOOTHBRUSH outlived its usefulness? In spite of the fact that toothbrushes are widely available at prices as low as 15 cents each, many people apparently make their toothbrush last a lot longer than they should. An examination made at the University of Illinois, College of Dentistry, of 2032 brushes indicated that 1219 were unusable and 90 were doubtful. Nearly 60 percent should have been discarded. One way to keep a toothbrush in good condition is to make certain that it is completely dry before use. It is advisable to have two or three and use them in rotation.

* * *

LONGER CIGARETTES WITH FILTERS CONTAIN LESS TOBACCO. According to C. I. Hendrickson, agricultural economist in the U. S. Department of Agriculture, the longer cigarette, equipped with a filter and filled with 14 percent "sheet tobacco" and stems, now holds only 1.45 pounds of natural-leaf tobacco per 1000 cigarettes, whereas 2.2 pounds of tobacco were formerly used in regular cigarettes. This may be a cause of concern to farmers, but consumers worrying about the statistical data relating the incidence of lung cancer to smoking may have cause for rejoicing.

* * *

THE LOSS OF COLOR IN DRY CLEANING is a growing problem. Many women make it a practice to take to the dry cleaner their best cotton garments, and others which may be washable, on the theory that colors will remain brighter than if the garments are laundered. The National Institute of Drycleaning reports a number of cases of color loss in dry cleaning due to the fact that some textile printers are using a type of dye that is fast to washing but not to dry cleaning. Furthermore, even dry-cleanable garments, including nylon sheers, acetate rayons, and others, show loss of color when they have been printed with what are called resin-bonded pigment colors. Some of these pigments dissolve in dry-cleaning solvents, causing fading or color change. The National Institute of Drycleaning reports that there is no way in which either the consumer or the dry cleaner can tell from inspection whether garments can be dry cleaned satisfactorily or if they should be wet cleaned. The consumer who wishes to take no chances will buy from a store that will make good if the garment does not clean satisfactorily. She should also check the hang tag for information about washing or dry cleaning before she buys a garment.

* * *

THE PITCH MADE BY MAX FACTOR on television and radio for a wave preparation called Natural Wave has brought loud protests from the professional beauticians. They claim that it just isn't possible for a hair spray to do any more than help a woman curl her hair, and that naturally straight hair can't be changed to naturally curly just by spraying on a cosmetic as claimed. Here is a case where every woman who is interested can make her own test—for a price—and decide for herself whether the claims are true or false. Of course, she would have to buy at least one can of the stuff to make the experiment, and perhaps that's all Max Factor expects of the program.

* * *

PRICE TAGS ON THE 1959 AUTOMOBILES are higher due to increased costs of labor and materials. An official of the Ford Motor Company, addressing a business-luncheon group last summer, reported that the automobile industry operated on a very close profit margin and indicated that when wages go up, retail prices of the finished cars go up. He announced that the Ford Company was introducing fuel-economy refinements in its new engines and transmission, but refused to predict "if or when" the company would produce a small car. He did admit that current surveys showed fuel economy to be the biggest reason for sale of small foreign cars.

THOSE LITTLE HOLES IN CHILDREN'S SNOWSUITS and cotton car coats may be caused by contact with acid. The National Institute of Drycleaning points out that damage may also be due to calcium chloride, widely used on streets in the wintertime. The damage does not show up immediately but develops after the calcium chloride becomes concentrated in the fabric, weakening the area and causing holes to develop. Other instances of acid injury to adults' clothing may come from contact with storage batteries, deodorants, and chemicals used in photographic work.

* * *

THE FUEL SAVINGS for some of the foreign automobiles amount to as much as 60 percent. That could add up to something like \$120 a year, according to a gasoline trade journal, which expresses concern about the effect of the increasing popularity of the economical foreign cars on sales of gasoline in the United States.

* * *

THE TECHNIQUE OF USING A WHITE-COATED YOUNG MAN on the television commercial who seems to represent a doctor is severely criticized by a veteran advertising agency man. This critic points out that the impersonation of a doctor to deliver the commercial in solemn tones is not only annoying to the doctors but is likely to get copywriters of a number of programs in trouble with the F.T.C., even though the actual claims are technically correct. He points out that not more than one product in a thousand has any right to claim endorsement by the medical profession and that doctors don't endorse things, particularly branded commercial products. He suggests that TV copy has become so sloppy and careless in its treatment of the doctor theme that if advertisers don't begin to police themselves they may find the policing will be done for them. The National Association of Broadcasters has already decided to amend their TV code to outlaw "white coat" commercials, except when presented by accredited physicians, dentists, and nurses.

* * *

OPPOSITION TO COMPULSORY FLUORIDATION of city and municipal water supplies is widespread. For the minority who want fluoridated water, Chemical and Engineering News describes a fluoridation unit invented by a group of Canadians for home use. The unit connects to the home water system just back of the tap. It consists of a small 6-inch-high canister that contains a polyethylene bag holding 310 cc. of 2 percent sodium fluoride solution. The device is expected to sell for around \$130 installed. The accuracy with which the device "meters" the fluoride is not indicated.

* * *

THE FASHIONABLE SKINTIGHT PONYTAIL HAIRDO may cause trouble. According to reports from abroad, it has been held responsible for loss of hair at the edge of the scalp, producing a receding hairline. Reduced hair growth in certain spots has also been attributed to the ponytail, in some cases.

* * *

WHEN BUYING A NEW CARPET give some consideration to its flame resistance. A cigarette dropped carelessly on a floor covering may cause trouble. According to a bulletin entitled "When You Buy Floor Covering," put out by the University of Wisconsin Extension Service, wool, nylon, and Saran have excellent flame resistance; Dynel is good in this respect. Rugs or carpets made of cotton, rayon, Fiber E rayon and Acrilan have poor flame resistance.

* * *

IF YOU ARE A MEAT EATER, you will appreciate some excellent advice given by the Montana Agricultural Experiment Station in the little bulletin entitled "Meet Your Meats." It is pointed out that fresh meat should be stored in the home refrigerator only loosely covered so that cold air can circulate around it and prevent spoilage. Precut, prepackaged meat should be unwrapped at once and lightly covered for storage in the home refrigerator.

(The continuation of this section is on page 37)

Consumer Bulletin

THE ORIGINAL CONSUMER INFORMATION MAGAZINE

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Listings usually are arranged in alphabetical order by brand name (not in order of merit) under each quality or performance rating. A numeral 1, 2, or 3 at the end of a listing indicates relative price, 1 being low, 3 high. Where the 1, 2, 3 price ratings are given, brands in the 1, or less expensive group, are listed alphabetically, followed by brands in price group 2, also in alphabetical order etc. A quality judgment is wholly independent of price.

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Television receivers for 1959

THE 1959 television receivers are here. Though the advertising shows many claims of innovations, there are few new developments of importance actually embodied in the "1959" model receivers. The only really radical change in design is the one seen in Philco's new *Predicta* line of receivers, to be discussed later.

The 110-degree picture tube, which makes for a shallower set with less projection into the room, was last year's big news; this tube is now almost universally used in the 1959 receivers.

One reason there are so few startling important developments this year is probably that manufacturers are giving more emphasis to sales of low-priced sets. The sales of TV in 1958 were lower than in previous years, and many manufacturers have trimmed their lines to fewer models, in an effort to hold prices at a level equal to those of 1958 or in some cases to even lower figures.

New development

The trend to thinner TV receivers, started last year with the use of the 110-degree picture tube, has been further advanced with Philco's *Predicta Series* receivers. Philco's contribution is a design that allows still further reduction in the depth of the receiver. Philco has removed the picture tube from within the cabinet and placed it on top, out in the open. The effect when observed

from the front is startling and an observer may think that the much talked of "flat picture" or "wall TV" is close at hand (see Figure 2). However, it is apparent from the side that there is a substantial third dimension to the set, as the plastic-encased 21-inch picture tube is 14½ inches deep (still thin by comparison with the tubes of previous years).

Unfortunately, while the outward design of the *Philco* receiver is fresh and well executed, the performance of the receiver, which we think is the most important factor to most users, was found to be only average. Only time will tell how acceptable to the public this style of receiver will be.

Portable or table model?

Some of the 21-inch receivers are promoted as portable or combination portable and table models. About the only thing that makes these sets appear portable is the presence of a handle or, on the sets whose manufacturers have some consideration for the users' back muscles, two handles. The weight of these sets (around 60 pounds) was far above what any women and most men of sedentary occupation would consider portable. As a matter of fact, most of the 17-inch portables, too, would hardly be classed as portable by many.

Safety

Following the deaths of several children during the past year from electric shock received from television receivers, the designers have made a sincere effort to correct faulty designs and have made well-executed changes in circuit designs. Some of these changes are by no means new, but are reversions to the designs of a decade ago; safer circuits were standard practice in some of the first receivers put on the market, back in 1948. Many of the sets tested this year by Consumers' Research were found to have power transformers and vacuum-tube rectifiers instead of the undesirable and potentially hazardous combination of metallic rectifiers and power supplies of the type that has the power line connected to the chassis. To the layman, this means that circuit elements that have for some years made an important contribution to the possibilities of shock hazard have been eliminated in many models.

Even the portable receivers, in which the additional weight of a power transformer was thought to be a merchandising liability in 1958, are using power transformers and vacuum-tube rectifiers; both are real steps toward reducing shock hazard.



Figure 1—This General Electric 21-inch receiver is a good example of the trend to combination portable-table-model receivers. The new shorter neck picture tubes permit a decreased depth from front to back on this type of set.



Figure 2—The new Philco Predicta appears from the front to have a flat wall-type screen mounted above its small cabinet, as shown on the left. However, as the picture on the right shows, even though the picture tube is considerably shorter than those in previous years the set still retains a substantial "third dimension."



to TV viewers and especially to young children in the home.

Some makers, though still using metal cabinets, have limited the area of exposed metallic surfaces. The front and back sections of their cabinets are of plastic, and there is a center "wrap-around" metal section; this is coated with an insulating material, plastic bonded to the metal.

Leakage current measured on all the receivers tested was satisfactorily low and indeed in some cases low enough to be considered negligible. However, since a portable receiver receives much more abuse than a table model, and the vinyl coating can be scuffed by accident or abuse, baring the metal, CR considers any so-called portable receiver using a metal cabinet and metallic rectifiers to be worthy of a rating no higher than *B. Intermediate*.

Many manufacturers have begun to use either germanium or silicon rectifiers in place of selenium rectifiers; while the use of the preferred two kinds of metallic rectifiers usually is in conjunction with the undesirable "transformerless" chassis, the germanium and silicon rectifiers will generally prove to be longer-lived components, and will give somewhat better receiver performance.

CR's tests

Performance of the 17 1959 TV receivers tested by Consumers' Research is shown in tabular form on pages 8-9. So-called 21-inch portable receivers were included as regular sets, rather than portables, since the lightest of them was considered too heavy to be carried easily by one person. Prices are factory-suggested list but, as is the

case with most appliances, a careful shopper can usually obtain a considerable discount, somewhere in the range of 15 to 30 percent.

Some discount houses do business on an ethical and fair basis; others cannot be trusted, and some so-called "fast-buck" operators will sell more cheaply than others because they will accept no responsibility for the set once it has been delivered.

Television receivers are listed in alphabetical order within the *A-* and *B-*rated groups.

Table-model receivers

A. Recommended

Motorola, Model 21T61M (Motorola, Inc., 4545 W. Augusta Blvd., Chicago 51) \$230. The performance of this receiver was generally above average. Some additional brightness of the picture would be desirable. The set should give good performance in fringe areas. ¶Other Motorola models using the same chassis are: table models—21T58, 21T60; consoles—21K98, 21K100, 21K101, 21K102, 21K103, 21K106.

Motorola, Model Y21P1B (Motorola, Inc.) \$230. This 21-in. portable or table receiver used a desirable fiber-glass cabinet. The overall performance of this receiver was somewhat above average. Some improvement in picture "interlace" would be desirable. Fringe-area reception should be satisfactory. Though this set is promoted as a combination portable and table receiver, its 59 lb. weight would not be considered as making the set very readily portable.

Sylvania, Model 21T305 (Sylvania Electric Products, Inc., Batavia, N.Y.) \$270. This set uses a chassis essentially the same as that of the 1958 Sylvania Model

Table of characteristics of 1959 model

	Regular sets									
	Admiral T21G1	GE 21T2428	Hoffman M-1291	Motorola 21T61M	Motorola Y21P1B	Philco G4542-M	RCA 21T9152	Silvertone 9118	Westinghouse 17C2881	Zenith B-2225
Tube size, in. (diagonal)	21	21	21	21	21	21	21	21	17	21
Viewing area, rated, sq. in.	261	262	262	264	264	263	263	262	154	263
Weight, lb. ¹	—	—	—	—	—	—	—	—	—	—
Cabinet material	Metal	Metal	Wood	Wood	Fiber glass	Wood	Metal	Metal	Wood	Wood
Locations of controls	Front	Front	Side	Front	Top	Front	Front	Top	Side	Front
Loud-speaker size, inches	5	4 x 6	4	4	5	10	4	5	6, 3	7½
Type of rectifiers ²	VT	VT	Sil.	VT	Sil.	Ger.	VT	Sil.	Sil.	VT
Workmanship	Sat.	Good	Sat.	Good	Good	Good	Good	Sat.	Good	Sat.
Ease of servicing	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Sensitivity ³	Sat.	Good	Sat.	Good	Good	Good	Sat.	Good	Sat.	Good
Picture stability	Fair	Good	Sat.	Good	Sat.	Fair	Sat.	Sat.	Sat.	Good
Picture interlace	Sat.	Good	Sat.	Sat.	Sat.	Good	Sat.	Sat.	Good	Sat.
Picture brightness	Sat.	Sat.	Good	Sat.	Sat.	Fair	Fair	Fair	Good	Sat.
Overall picture quality	Sat.	Good	Sat.	Sat.	Sat.	Sat.	Sat.	Sat.	Good	Sat.
Interference rejection	Fair	Sat.	Fair	Sat.	Sat.	Fair	Sat.	Sat.	Sat.	Sat.
Sound quality	Sat.	Good	Sat.	Sat.	Sat.	Sat.	Sat.	Sat.	Good	Good
Low-voltage operation ⁴	Sat.	Good	Good	Good	Good	Fair	Fair	Good	Good	Good
Leakage current	Sat.	Neg.	Neg.	Neg.	Sat.	Sat.	Neg.	Sat.	Sat.	Neg.

¹ Combination TV and record player.² Regular table-model (21-inch) TV receivers weigh about twice as much as the 17-inch portable receivers.³ See text.⁴ Ability of receiver to produce a satisfactory picture in fringe areas.⁵ In many areas, low power-line voltages will be encountered during evening hours. A TV set should function satisfactorily at a line voltage as low as 100.⁶ Some shock hazard present; leakage current was 0.6 ma.

21T114M receiver reported by CR in the December 1957 *Bulletin*. The general performance characteristics of this receiver were above average. It should provide a satisfactory picture in fringe areas. ¶Other *Sylvania* sets using similar chassis are: Consoles 21C616, 21C621.

Westinghouse, Model 17C288 Combination (Westinghouse Electric Corp., Metuchen, N.J.) \$200. This combination receiver incorporated a 17-in. TV set with a *Collaro* 4-speed record changer in console-type cabinet. The overall quality of reception of the TV section was above average. For fringe-area reception, somewhat higher sensitivity would be desirable. The record changer played through the TV sound circuits and speakers, and the quality of sound, while not represented as being high

fidelity, was good. While the *Collaro* changer worked satisfactorily, it was not tested extensively.

Westinghouse, Model 21T220 (Westinghouse Electric Corp.) \$260. This set is essentially the same as the 1958 *Westinghouse* receiver reported by CR in 1957. It was worthy of an *A-recommended* rating without qualification. Should provide a satisfactory picture in fringe areas. ¶Other *Westinghouse* models using similar chassis are: table models—21T206, 21T218; consoles—21K210, 21K223, 21K226, 21K228.

Zenith, Model B-2225 (Zenith Radio Corp., 6001 Dickens Ave., Chicago 39) \$230. Overall performance of the receiver was considerably above average. Sound quality from 7½-in. speaker was very good for a table-

TV receivers tested by Consumers' Research

Portable sets							
GE 17T2410	Motorola 17PS-2	Philco G-3060-GL	RCA 17PD9064	Silvertone 9104	Sylvania 17P110Q	Zenith B-1716G	
17	17	17	17	17	17	17	Tube size, in. (diagonal)
155	155	155	155	155	151	154	Viewing area, rated, sq. in.
38½	36	31	42½	29½	33½	46	Weight, lb. ³
Metal	Metal	Metal	Metal	Fiber glass	Metal	Metal	Cabinet material
Front	Side	Top	Side	Side	Top	Front	Locations of controls
4	4	5	4	4	4	4	Loud-speaker size, inches
VT	Sel.	Sil.	VT	Sel.	Sel.	Sel.	Type of rectifiers ³
Good	Sat.	Good	Sat.	Good	Sat.	Sat.	Workmanship
Good	Fair	Good	Good	Good	Good	Good	Ease of servicing
Good	Sat.	Sat.	Sat.	Good	Sat.	Good	Sensitivity ⁴
Good	Fair	Fair	Sat.	Sat.	Fair	Sat.	Picture stability
Good	Sat.	Sat.	Sat.	Good	Sat.	Sat.	Picture interlace
Sat.	Sat.	Good	Sat.	Sat.	Sat.	Fair	Picture brightness
Good	Sat.	Fair	Sat.	Good	Sat.	Sat.	Overall picture quality
Sat.	Fair	Fair	Fair	Good	Sat.	Fair	Interference rejection
Good	Sat.	Sat.	Sat.	Sat.	Sat.	Sat.	Sound quality
Good	Fair	Fair	Fair	Good	Fair	Fair	Low-voltage operation ⁵
Neg.	Sat.	Sat. ⁶	Sat.	Sat.	Sat.	Sat.	Leakage current

Sat.—satisfactory or satisfactorily low.
 Neg.—negligible, under 0.2 ma.
 VT.—vacuum tube.
 Sil.—silicon.
 Sel.—selenium.
 Ger.—germanium.

model receiver. This set had very good sensitivity and would be suitable for fringe-area reception. ¶Other Zenith models using the same basic chassis are: table models—B-2221, B-2223, B-3001; consoles—B-2245, B-2246, B-2247, B-2249, B-2254, B-2673, B-3006, B-3007, B-3008, B-3009.

B. Intermediate

Admiral, Model T21G1 (Admiral Corp., Chicago 47) \$190. Overall operation of this receiver was about average. Picture stability was below average. Interference rejection was only fair and "electrical noise" pulses such as those due to certain motor-driven appli-

ances caused loss of vertical synchronization. Sound was badly distorted on weak signals, such as those received in fringe areas, but sound was otherwise satisfactory. ¶Other Admiral models using the same chassis are: table model—T21G2; consoles—C21G2, C21G3.

General Electric, Model 21T2426 (General Electric Co., Syracuse) \$250. The overall performance of this receiver was above average. It should provide good reception in fringe areas. Chassis is of the type that uses a power transformer, and leakage current was negligible, but part of the cabinet is made of metal, the use of which CR considers undesirable in any receiver sold for use as a portable (even though the metal is coated with plastic, see text). Otherwise this set would

be *A. Recommended*. This set was of the "Designer" series and was comparatively shallow in depth (see Figure 1). ¶Other models using the same chassis are: table models—21T2419, 21T2420, 21T2421, 21T2425; consoles—21C2440, 21C2441, 21C2445, 21C2446.

Hoffman, Model M-1291 (Hoffman Radio Div., Hoffman Electronics Corp., Box 2153-TA, Los Angeles 54) \$220. The overall performance of this receiver was found to be about average. Sensitivity was considered satisfactory for metropolitan areas but not high enough for good fringe-area reception. ¶Other Hoffman models using the same chassis are: table model—1277; consoles—3411, 3421.

Philco Predicta, Model G4242-M (Philco Corp., Philadelphia 40) \$260. This receiver offered the only significantly new design development this year. The new extra-short picture tube, which is encased in a close fitting plastic sheath, mounted in a swivel mount on top of a small cabinet (see Figure 2), appears to be a useful approach to the long-awaited flat, wall-type TV. While the overall performance of the receiver was only average, its sensitivity was considered adequate for fringe-area reception. Improvements in picture stability, vertical linearity, and especially in brightness of picture would be desirable. Operation at lower-than-normal line voltages was only fair. ¶Other models using a similar chassis are: table model—4240; consoles—4654, 4658, 4662, 4710, 6628.

RCA, Model 21T9152 (RCA Victor TV Div., Radio Corp. of America, Camden, N.J.) \$200. The overall performance of this receiver was only about average. Sensitivity was satisfactory, but additional brightness would be desirable. The horizontal hold-control was found to interact with the vertical hold-control over part of their critical ranges. The RCA had the undesirable metal cabinet, but does use a power transformer, a component that is desirable for safety. ¶Other models using the same basic chassis are: table model—21T913; consoles—21T921, 21T922, 21T923, 21T925, 21T931, 21T933, 21T935, 21T939, 21T941, 21T943, 21RT963, 21RT965.

Silvertone (Sears-Roebuck's Cat. No. 57—9118) \$190, plus shipping charges. Overall operation of this receiver was somewhat above average. Should be satisfactory for use in fringe areas. Additional brightness of the picture would be desirable. Use of metallic rectifiers and a metal cabinet (though vinyl clad) is undesirable from the standpoint of potential shock hazard. ¶Cat. No. 57—9119 is the same except that it has a UHF tuner.

17-inch portable receivers

A. Recommended

Silvertone (Sears-Roebuck's Cat. No. 57—9104) \$160, plus shipping charges. Overall performance of this portable receiver was above average. It should provide good reception in fringe areas. Use of fiber-glass cabinet is a desirable feature in a portable TV receiver, as it minimizes potential shock hazard. Leakage current was satisfactorily low.

B. Intermediate

Airline (Montgomery Ward's Cat. No. 63—4202) \$148, plus shipping charges. This portable receiver uses

a chassis quite similar to the Westinghouse 17C288. Its performance is similar, but Consumers' Research regards the use of a metal cabinet for a portable receiver as an undesirable practice in that it may present an unnecessary potential shock hazard.

General Electric, Model 17T2410 (General Electric Co.) \$200. The picture and sound quality were above average on this receiver. Set should provide good reception in fringe areas. An attempt to reduce potential shock hazard in a portable receiver is evidenced by use of a power transformer and of plastic front and back panels. However, the center section of the cabinet is metal; CR considers the use of metal (though vinyl clad) in the cabinet undesirable in a portable receiver. With a cabinet made of non-conducting material, this set would be *A. Recommended*. ¶Other GE models using the same chassis are: 17T2405, 17T2411, 17T2412, 17T2432, 17T2433.

Motorola, Model 17P5-2 (Motorola Inc.) \$155. The overall performance of this receiver was fair to satisfactory. This receiver has one side of the power line indirectly connected to the chassis, and uses a metal cabinet. Both conditions are undesirable in the design of a portable receiver. ¶Other Motorola models using the same chassis are: 17T32, 17T33.

Philco Slender Seventeen III, Model G-3050-GL (Philco Corp.) \$180. Overall performance of this portable receiver was satisfactory, except that set was susceptible to r.f. interference (shown by herringbone pattern in picture). Uses metal in part of the cabinet and has one side of power line connected to chassis. Both conditions are undesirable, as they may involve an unnecessary potential shock hazard. Some shock hazard present; leakage current was 0.6 ma. ¶Other Philco models using the same chassis are various colored-cabinet versions of models 3050 and 3052.

RCA, Model 17PD9064 (RCA Victor TV Div., Radio Corp. of America) \$190. Overall performance of this receiver was only average. While overall picture quality was better than that of last year's RCA portables, improvements in interference rejection would be desirable. Use of a metal cabinet in a portable receiver is undesirable and presents an unnecessary potential shock hazard. ¶Other RCA portables using the same chassis are 17PT904, 17PD905, 17PD907.

Sylvania, Model 17P110Q (Sylvania Electric Products Inc.) \$180. Overall performance of this receiver was only average. The picture was unstable on weak signals and the interlace could stand some improvement. Use of a metal cabinet in a portable receiver, especially with one side of the a-c line connected to the chassis, creates an unnecessary potential shock hazard.

Zenith, Model B-1716G (Zenith Radio Corp.) \$180. Overall performance of this receiver, while satisfactory, was not equal to that of Zenith portables of previous years. Operation was only fair on reduced line voltage, and picture stability needed some improvement on weak signals. Additional brightness of the picture would be desirable. Use of metal cabinet in a portable receiver is undesirable. ¶Other Zenith portables using the same chassis are: B-1410L, B-1411P, B-1412G, B-1413G, B-1715L, B-1717J, B-1718B, B-1719P, B-1720G, B-2001L.

The 1958 Amendment to the Food and Drug Act

*This new law will be a help to the manufacturers
in stilling consumer protests against
the ever-growing practice of doctoring foods with chemicals*

THE FOLLOWING is the first paragraph of a statement by the technical director of Consumers' Research presented on December 13, 1950, to a committee of the House of Representatives set up by the 81st Congress investigating the use of chemicals in food products.

"The most important consideration from the consumer's standpoint is the undesirability of the present control arrangements [applicable up to September 1958], by which the Government must prove that a given substance added to foods or beverages is harmful. It is the view of Consumers' Research that the burden should be upon anyone who proposes to use a new and unapproved substance in connection with foods or food preparation to show affirmatively that the product to be added is without capacity to cause substantial harm to any individual . . . , on the basis of tests conducted by independent consultants and laboratories."

The point of view expressed by CR's technical director in the quotation above was adopted, in principle though not in fact, in new legislation, the food law amendment of 1958 on "food additives." This amendment to the Food, Drug, and Cosmetic Act of 1938, passed by the 85th Congress, became law on September 16, 1958.

Newspapers and magazines will promptly inform everyone that consumers may now cease to worry about potentially poisonous ingredients in foods. They will tell us, too, that from now on, the government, which has been very anxious to improve the protection afforded the consumer, will be enabled to carry out its task with vigor and effectiveness, under the new law. Such statements, which will be based on press releases from governmental and food industry sources, will be very misleading to consumers, for the drafting of the new legislation was largely determined by the pressures of industry legal experts, who were able to see to it that the new law is so constructed that (a) no one but a lawyer, one of great ability, and time for close study, can possibly understand its provisions and (b) the loopholes that have been provided are so large and so numerous that many sorts of chemical additive that the food industry wishes to use can get by, if only those who favor them take care to employ the right experts to "prove" them harmless.

Fortunately, for the food industry, and most unfortunately for the consuming public, the great majority of research agencies available for testing the poisonous qualities of additives will be those that are likely to turn up with an answer favorable to the interests of industry. There is no provision in the new law for making the laboratories' tests completely independent of any direction, control, or pressure by the manufacturer of the food or additive—who rightly should cease to have any control whatever over the work, once he has signed an order to the laboratory to begin its work. (Exactly this point was made in Consumers' Research's recommendations for revision of the Food, Drug, and Cosmetic Act, but nothing appears in the amendment which will provide for the toxicological competence and skill, and the technical and scientific independence of the testing.)

The fundamental weakness in the new amendment is in the details of the enactment. At a number of vital points provision is made for an escape from any firm, rigorous rule or requirement. Thus, instead of providing—as the highest authorities recommend—that no additive shall be permitted that has been found to cause cancer in any kind of test animal by any route of administration (by mouth, skin contact, by injection under the skin, by inhalation), at any dosage level, or of any additive which from the nature of its chemical structure, origin, or processing might be deemed to be carcinogenic or closely related to a known carcinogen, the law's prohibition is much more limited. It forbids use of an additive "found to induce cancer when ingested by man or animal, or if it is found, after tests *which are appropriate for the evaluation of the safety of food additives*, to induce cancer in man or animal; . . ."

Another curious provision of the law is one which does not provide that residues of harmful poisons used against insects shall be held to a minimum which is free from danger to consumers, but only that the "residue in or on the raw agricultural commodity shall have been removed to the *extent possible in good manufacturing practice* [italics ours] and the concentration of such residue in the processed food when ready to eat is not greater than the tolerance prescribed for the raw agricultural commodity; . . ."

This may mean that the finished food product does not need to be any freer of poisonous materials used in killing of insects, fungi, etc., than the forage or other feeding stuffs consumed by swine, sheep, cattle, or poultry.

The Secretary of Health, Education and Welfare is permitted wide latitude in many other respects. He may for example decide upon a safe amount of a toxic substance, not by known and reliable toxicological test data, weighted, if at all, in the direction of providing the greatest safety to young and old, well and ill, vigorous or feeble, but by what he deems to be "the *opinion* of experts qualified by scientific training and experience to evaluate the safety of food additives" on the basis "of animal experimentation data."

That leaves the Secretary of Health, Education and Welfare to decide not only which opinion, among conflicting ones, he chooses to accept, but which experts have the "right" kind of training and experience. Such a provision, with its wide opportunity for decision by a political officer on a personal rather than a firm legal and scientific basis, has no place in a law that affects the health and safety of 170 million consumers.

It is much as though a city government were to establish fire safety regulations for motion picture theaters upon the judgment of an official applied according to his own opinions in each case rather than by rules and principles clearly set forth in advance, and applying equally to all buildings of the same class and binding upon building owners and the city administrative officials alike.

It is contrary to sound principles of public administration, where technical and scientific principles are involved, to leave the final judgment of the frequently conflicting opinions of qualified experts to a political officer. Such an appointee is subject to the regional pressures of fruit and vegetable growers, for example, and the need for compromise implicit in deciding what residues of insecticidal substances shall be allowed on citrus and other fruits and on vegetables, when the substance may be one that is known or suspected to have cancer-starting tendencies or other toxic qualities. (Such a substance, found to cause cancer in two species of test animals, rats and dogs, is in actual use, and a residue of it on food is tolerated. Yet no residue of the same insecticide is permitted on alfalfa and soybean plants used as feeds for farm animals.)

No secretary of a government department has the capacity to make such tremendous decisions wisely; literally the life and health of millions of persons will depend upon the way he exercises his scientifically untrained judgment and who talks to him, without a public record of the interview, before he decides. It is as though the Secretary

of Defense were to take it upon himself personally to pass on the readiness for launching of a guided missile with an atomic warhead. Such decisions must be made by technical experts and *only* by technically trained people. The use of scientific advisers by a technically and scientifically qualified person would of course be proper; the harm is in permitting a political official to accept or disregard the advice, as he may choose.

There are established ways of testing foods and food additives for safety, but the law specifies none of these; it leaves the matter to the mere judgment of a non-technical executive, who may if he chooses to do so, accept and act only upon the advice of people not professionally qualified in any way to determine whether an insecticide may cause kidney disease, or cancer, whether a food fat or a fat preservative may predispose to heart disease, or a food dye may be one of a family recently found to be objectionable and toxic, or perhaps, as has happened, a member of a family of known carcinogenic chemicals.

A food trade paper announces, regarding administrative regulations to be established under the amendment, "the food and chemical industries" will be given "an informal look at the proposed regulations before they are published in final form—some method of obtaining industry reaction will be worked out." It is typical of the thinking of the trade and of federal food and drug officials that they should consider carefully the views of industry and seek no advice or criticism from the small but important number of scientists who can speak for consumers. So important has it been to withhold from publication the views of those who would hold in some restraint the ever-increasing tendency to modify and preserve foods to better appearance and a long shelf-life with chemicals of unknown properties, that federal officials, chiefly in the Food and Drug Administration, blocked the publication of an important summary paper dealing with the subject by the Bureau of Public Health's leading expert on cancer induced by substances and causes present in man's environment, Dr. W. C. Hueper. Dr. Hueper is not only America's greatest authority on the subject of environmental cancer, but has international repute in this field; he has contributed in important ways to the public welfare by scores of technical papers on the causation of cancer and one monumental book on the subject. Just at this moment in food and drug history, the thing most needed is free and prompt publication of papers on all toxicological aspects of chemical additives (and on preservative treatment of foods by ionizing radiation—atomic energy) by all qualified specialists, no matter whose practices or negligence, in government or in industry, are sub-

jected to scrutiny, or to criticism and condemnation.

Another triumph of the food industry was in a simple matter of nomenclature. The amendment was originally to deal with chemical additives. Now it is called the "Food additive amendment of 1958," a small matter, it might seem, but a vitally important one when one realizes that the aim was to get the public's mind off *chemicals*, and to bring in the implication to the non-technical public that the additive is itself a food, not a *chemical added* to food. The food industry correctly feels that the change from *chemical* additives to *food* additives will set many a consumer's doubts at rest and greatly reduce the public's resistance to use of chemicals as modifiers of the appearance and texture properties of foods and beverages and as preservatives (a fast-growing trend).

Under the new law, a whole class of additives now in use will be permitted to continue in use without the necessity of tests to determine if they are really safe, if only they "are generally recognized by experts to be safe." This is a most unwise provision, for the margin between safety and non-safety is a thin and ever-changing one. A considerable number of substances, coumarin, for example, once widely used in imitation vanilla extract and for other flavoring purposes, have been for many years thought to be quite harmless, but are now known to be unwholesome and dangerous. Of two chemical sweeteners or sugar substitutes once accepted as safe, one was found poisonous, and the other poisonous and capable of inducing cancer in test animals.

The following are a few of the chemical additives that are used in foods, and are *believed* by some officials and by industry to be safe in such use: Butylated hydroxytoluene (in meat products), Sodium diacetate (in bread), Sulfur dioxide (in certain foods), Tocopherol, Sodium silico aluminate (in sugar and salt).

The following are some of the several hundred chemicals used in foods and beverages regarding which there is much doubt as to their safety: Sodium nitrite (on fish fillets and poultry products, as a preservative); Sulfur dioxide (preservative, harmful in foods that are good sources of vitamin B₁); Sodium silicate (an alkali); Soap (emulsifier); Hydroquinone (anti-oxidant); Nitrated flour (to give an egg-like color to food); Peracetic acid (preservative); Cyclic glassy phosphates (sequestrants); Ammonium persulfate (bleach).

There are not less than 275 of such chemicals whose safety is not established for use in foods and beverages, and it will take many years for their safety to be determined, by the end of which time many new additives will have been offered.

and tried, whose safety and wholesomeness will also not be known. New food chemicals are being brought out constantly; this is one of the most active fields of chemical research—and one of the most inactive in respect to research by toxicologists (experts on poisons) whose principal activity is in relation to the problems of the great manufacturing industries which produce and process metals and alloys, automobiles, industrial and agricultural chemicals, petroleum and other fuels and lubricants, plastics, and nuclear energy.

Literally thousands of chemical substances have been considered for use in foods; something over 700 are in actual known use. Of these, as already noted, nearly 300 have not been adequately tested and hence are not known to be safe. These are in a sort of scientific no-man's land; their use should be *stopped*, now, by federal and state government orders, until their safety is established.

If you think we have spoken too often of cancer and heart disease, we should like to remind you that there is a strong likelihood that many cases of both are the results of something unusual that is going on in regard to our ways of farm and factory processing and preserving foods. Second, that one half of today's deaths in hospitals are due to cancer; that 228 of a group of 500 women examined by experts in diagnosis had evidence of a precancerous condition; that one third of all Americans now living will probably develop cancer before they die.

It makes a big difference to all of us whether a "Food Additives" amendment was really set up to provide sound consumer protection or whether it was contrived to provide a field day for lawyers and to still the persistent questioning of food manufacturers' practices by medical men and by the growing number of interested persons in the public at large. Millions who read labels know that they are asked to eat many things that were never a part of the natural diet of men and that cannot possibly have been tested to the point of certainty that they will not cause or contribute to illness or, in time, to fatal disease.

We suggest that you ask your Congressman to send you a copy of the amendment, and judge for yourself what a poor job of bill drafting was done by the Food and Drug Administration. After you have tried to penetrate and interpret the amendment's many obscurities, ask your Congressman to see that an understandable complete digest of the law in layman's language is prepared and sent you. As a taxpayer and consumer, you have a right to know what the involved and complex clauses are intended to mean and just how the executive agencies concerned intend to effect control of poisonous and potentially poisonous additives.



Frigidaire



General Electric



Admiral



Philco

Electric ranges



Hotpoint

IT HAS BEEN SAID that the best design is often the simplest. Certainly this maxim applies to one's choice of an electric range if minimum need for service and low upkeep cost are considerations. The following copy of an itemized bill for repairs on a four-year-old *Frigidaire* top-of-the-line (higher-priced) model will serve to bring this point home.

New Cookmaster	\$17.40
20% Federal Tax on same	3.48
New timer	14.80
Service charge	12.50
Tax	1.07
Total	<u>\$49.25</u>

The 1958 model of this range is priced at the rather startling sum of \$550. But note that another model (of the same make) fully comparable in construction and performance carries a price of \$210. For the \$340 difference in price the consumer gets a multitude of extra added attractions primarily of value to the manufacturer and dealer because of the sales appeal which include such things as "Radiant Well Spatter-Free Broiler

All too often, the electric range which Mrs. Homemaker chooses for her home is not the model of simplicity and effective operation it should be; it may often be a "monster" dressed up with gadgets and features added for sales appeal, with a control panel as complicated as that on a large car or a small plane. Constancy and reliability of performance tend to become secondary considerations in the manufacturer's mind when he permits his sales department to run away with features of automaticity, frilly appearance, and gadgetry designed for sales appeal rather than for usefulness and efficiency.

Grill in Even-Heat, Quick-Clean Oven," "Electric Automatic Meat Tender and Roasting Guide."

The principal features of the \$210 model include only two six-inch and two eight-inch *Radiantube* surface units, a full-width oven, and an "Easy-to-use full-width control panel" with only



Norge



Kelvinator



Westinghouse

five control knobs, all of which are basic, useful, and practical.

The differences between the low priced and the more costly models of the *Frigidaire* are characteristic of all makes. What the consumer often doesn't realize is that ranges are assembled in long production lines, just as automobiles are, and until they reach the point on the line where the burners and accessories are attached, the \$200 range is identical to the \$550 one in all essential aspects of design, construction, and finish. For the price difference, the manufacturer supplies you with numerous gadgets and accessories, often automatic (as car manufacturers do with automobiles), which can only increase the need for servicing, step up maintenance costs, and in many instances actually tend to shorten the useful life of the product. *It is on these extras that the manufacturer and the dealer make their best profits*, and on these extras the consumer spends more and gets less than he does for the dollars that buy a simple workable range for cooking and baking.

Timers and controls

If information furnished by subscribers is an indication, the combination electric clock timed-oven control is the most wanted and least used of all the accessories available for a range. It has been the common experience that few people could master the intricacies of a timer such as the one pictured in Figure 2 without constant reference to the instruction book, and few people are willing to go to that trouble. As a result, of course, many of the expensive timers are not used and represent a substantial investment gone to waste.

Several brands of ranges, however, now use a timer which can be set properly and without difficulty (see Figure 1). Easily interpreted instructions on the panel obviate need for referring to the book of directions. Thus it seems reasonable that the housewife will use this type of control whenever it is needed and without risk of the

baking or roasting not proceeding as planned because she left one dial or knob out of her calculations.

Possibly developed to counteract one of the claimed advantages of the burners of a gas range, some of the late model electric ranges have burner controls which regulate the heat supplied by a burner element in a stepless manner rather than in 5 or 7 distinct steps. With these new controls, one can supply at will an amount of heat sufficient to keep the contents of a small pan just warm, or full burner output. While such a burner control has its obvious appeal from the salesman's standpoint, the prospective purchaser must not lose sight of the fact that any good cook can do—indeed millions have done for years—a most creditable cooking job using inexpensive controls which provide only five heat settings. The new heat controls, which are found on the more expensive models in several lines of ranges, all employ the same principle of operation. Essentially they make and break the flow of electricity to a burner at short intervals, depending upon the amount of heat output desired by the user. Thus, at a low or "keep warm" setting of the control, the burner may be on actually only about five seconds in every minute. At "High" it takes current continuously. Thus the amount of heat supplied by an element can be varied from very little to a great deal, to suit the needs of the user.

This new type of burner control may have a short life when compared with the five- and seven-position switch controls used on the less expensive ranges, because of the far greater frequency of "making and breaking" the supply of electricity to the burner. With the new burner controls, there is also the very practical disadvantage that each time current is interrupted a momentary electric arc is formed which creates radio interference. With four burners in use, and each one going on and off four or more times each minute as they do at some settings, you hear a continuing series of loud "plops" in your radio,

which can be most annoying. Thus, with this type of control, you may expect in exchange for your extra dollars improvement in sensitiveness of burner control, of some utility, perhaps, coupled with the probable need for some servicing of burner controls, probably at fairly high cost, and interference with radio reception.

While the relatively new "thermal control" burners are not far different in their manner of operation from those with "infinite heat control," they have real utility, for they do reduce the need for close attention to what is going on in cooking-vessels. An automatic temperature control of a burner can be most useful for certain dishes such as soufflés, rarebits, and some others which need to be prepared under carefully controlled temperature conditions. Possibly, the principal advantage lies in the fact that, if the burner control is properly set, a pot or pan will not burn or be ruined even though its contents are boiled away. Unfortunately, the thermal-control burner is considerably more complicated in design and operation than ordinary burners, and, therefore, may be expected to require servicing and replacement of parts from time to time.

CR's tests

A repair bill for \$25 or \$50 on an appliance is a



Figure 1—A type of timer control which is not difficult to set.

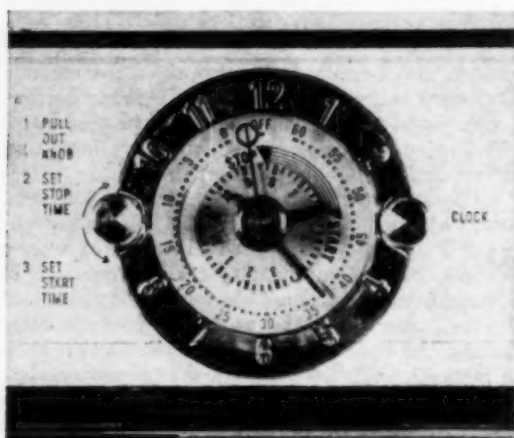
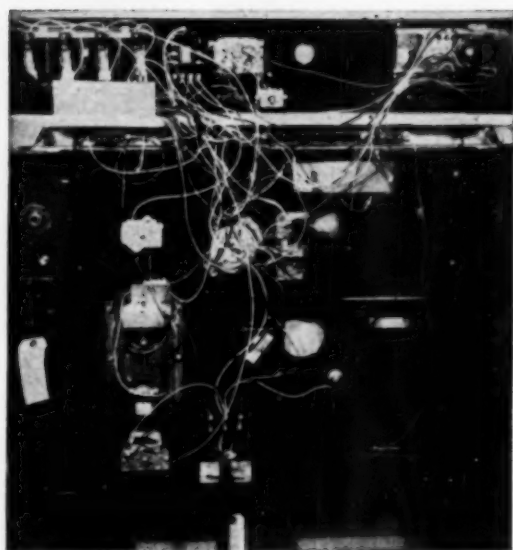


Figure 2—Most any homemaker would have trouble figuring out how to use this timer. This was not, however, one of the worst of the timers in this respect.



The complicated bird's nest appearance of the wiring at the back of some electric ranges is the result of adding various accessories and complex controls.

concrete, out-of-pocket expense which affects us directly, and sometimes means a real financial strain; unfortunately there are few major appliances now made on which such an expense will not be incurred from time to time. With an electric range, there are, in addition, certain hidden costs incurred in operation which vary, depending upon the design and construction of the cooking and oven heating elements, upon the design of the range itself, and how much and what kind of cooking is done with it. A certain proportion of our tests, therefore, are directed toward an evaluation of these very substantial costs of operation. If one has a choice of two burner elements of the same rated wattage, for example, one of which offers a heating efficiency of 80 percent, that is, delivers into the pan 80 percent of the heat supplied, and another of 60 percent, there can rarely be any doubt about the wisdom of buying the more efficient one. If your monthly cost for electricity for cooking on a range equipped with the most efficient burners is \$2—and that is a reasonable figure in many homes—it would cost you \$80 extra in 10 years' use of a range if you bought one that happened to be equipped with the least efficient burners in CR's tests. It is important, therefore, to the consumer that we determine the efficiencies of burners and ovens in use of electricity.

It is also important that the baking and broiling characteristics of the oven be determined. In this connection, the burners and ovens of each

Table showing some of the physical characteristics of the electric ranges tested by Consumers' Research

	Admiral	Frigidaire	General Electric	Hotpoint	Kelvinator	Morge	Philco	Westinghouse
Cooking, top-of-range								
Surface burners, position ¹	Split	Left	Left	Left	Split	Split	Split	Split
Degree of flatness	Good	Good	Fair	Fair	Good	Good	Fair	Fair
Degree of levelness	Poor	Poor	Poor	Fair	Fair	Fair	Good	Poor
Raised edge	Yes	Yes	Yes	No	Yes	No	No	Yes
Ease of cleaning	Sat.	Sat.	Sat.	Fair	Fair	Fair	Sat.	Good
Oven								
Size, cu. ft.	3.8	3.7	3.7	3.6	3.2	3.5	3.9	3.5
Racks, area, sq. ft.	2.7	2.5	2.8	2.7	2.3	2.7	3.0	2.7
Grid rods, spacing, in. ²	1.1	0.9	1.0	1.3	1.8	1.3	1.6	1.0
Lining, ease of cleaning	Sat.	Sat.	Sat.	Fair	Fair	Sat.	Fair	Sat.
Light protected	Yes	Yes	Yes	No	No	No	No	No
Window in door	Yes	No	No	No	No	Yes	No	No
Control panel								
Appliance outlets, number	2	1	2	2	1	1	1	1
Timed outlets, number	2	1	1	1	1	1	1	1
Circuit breaker protection	Yes	Yes	Yes	Yes	—	—	—	—
Fuse protection	—	—	—	—	Yes	Yes	Yes	Yes
Controls location, desirability	Fair	Sat.	Fair	Fair	Sat.	Sat.	Sat.	Sat.
Type of burner control	Knob	Knob	PB	PB	PB	Knob	PB	Knob
Fluorescent light	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Replaced from	Front	Front	Front	Rear	Rear	Top	Front	Rear
Ease of replacement	Good	Good	Good	Poor	Poor	Good	Good	Poor
Oven timer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ease of setting	Good	Good	Fair	Good	Good	Good	Poor	Poor
Legibility of clock face	Poor	Good	Poor	Good	Good	Good	Good	Fair
Ease of cleaning	Sat.	Sat.	Fair	Fair	Fair	Sat.	Poor	Sat.
Construction judged	Good	VG	Good	Good	Fair	Fair to Good	Good	Good

¹ Split refers to those ranges on which two burners are on the left side, two on the right side, with working space between. All ranges had four burners.

² The grid rods in the racks should be less than 1.3 inches apart.

Sat.—satisfactory; PB—push button; VG—very good.

range were used for a sufficient length of time to bring to light the desirable and undesirable factors in their operation.

In the listings that follow, the ratings are based principally upon the results of CR's performance tests of the models listed. The comments regarding the performance characteristics of the top-of-stove cooking elements are based upon efficiencies and speed of heating. With regard to ovens, efficiencies, speed of preheating, temperature variations, and biscuit baking tests were considered. The tests of the broilers were designed to measure

evenness and speed of broiling. In most instances, there are other models available in a manufacturer's line which employ cooking elements and ovens which are similar or identical in size, type, and construction to those present on the particular model tested by Consumers' Research. Where sufficient information was available to determine the probable performance of other models of the same make, they have been mentioned in the listings, along with their list prices as set by the manufacturer or a distributor. The consumer will find it worth while to shop

Table showing some of the results of the tests on electric ranges

	Admiral	Frigidaire	General Electric	Hotpoint	Kelvinator	Norge	Philco	Westinghouse
Surface burners								
Efficiencies of								
Regular—small	Avg.	Avg.	High	Avg.	Low	High	High	Very Low
Regular—large	High	Low	High	Avg.	High	Avg.	Avg.	Low
High speed	Avg.	Avg.	Avg.	—	Avg.	—	—	Very Low
Temperature controlled	High	Low	High	—	—	High	—	Low
Time to boil in minutes†								
Regular—small	7.3	6.1	6.8	7.4	7.7	6.8	5.6	7.5
Regular—large	7.1	11.5	7.5	6.4	7.3	6.5	6.4	8.1
High speed	4.7	5.9	5.7	—	6.0	—	—	6.7
Temperature controlled	7.1	7.9	6.3	—	—	12.5	—	7.5
Oven								
Time to preheat to 500°—min.	15	5	11	12	13	17	14	12
Temperature variation	Low	Low	Low	Avg.	Avg.	Avg.	Avg.	High
Comparative efficiency	Low	High	High	Avg.	Low	Low	Avg.	High
Biscuit baking	F-G	F-G	Fair	Good	F-G	Good	Good	F-G
Temp. of some exterior surfaces	Excessive	Sat.	Sat.	Sat.	Sat.	Excessive	Sat.	Sat.
Broiler								
Speed of broiling	Avg.	Fast	Fast	Avg.	Slow	Fast	Slow*	Avg.
Evenness of heat distribution	Fair	Fair	Fair	Good	Fair	Fair	Poor**	Fair

† One quart of water on small burners, two quarts of water on large and temperature-controlled burners.

* Fast, with glass removed.

** Fair, with glass removed.

Avg.—average
F-G—fair to good
Sat.—satisfactory

around, however, because electric ranges, like other appliances, can be bought at substantial discounts from the list prices given.

The electrical leakage current present (a measure of shock hazard) on all of the ranges tested was above Consumers' Research's permissible limit for an *A-Recommended* rating. Indeed, on some ranges tested, leakage was so high as to warrant a *C-Not-Recommended* rating. The tests made by CR show clearly that any electric range must be grounded, for safety.

The ranges tested are arranged in alphabetical order within the *B*, *B-*, and *C* rated groups.

B. Intermediate

Admiral Imperial, Model 4087 (Admiral Corp., Chicago 47) \$360. Performance characteristics: top-surface cooking elements, good; oven, fairly good; broiler, fair. The removable oven door is a good feature, but the glass window in it became too hot during a baking operation. ¶Models 4081, \$170; 4085, \$240; and 4089, \$440, are similar (see text).

Frigidaire Imperial, Model RI-55-58 (Frigidaire Div. General Motors Corp., Dayton 1, Ohio) \$440. Performance characteristics: surface cooking elements, fair; oven, good; broiler, fair. ¶Models RS-10-58, \$210; RD-20-58, \$260; RD-71-58, \$350; and RCI-75-58, \$550 are similar (see text).

General Electric, Model J-402 (General Electric Co. Appliance Park, Louisville 1) \$470. Performance characteristics: cooking elements, good; oven, good; broiler, good. The oven door is removable for cleaning, a good feature. ¶30- and 40-in. models in the *General Electric* line of ranges are comparable. Prices vary from approximately \$200 for the 30-in. Model J-301R to \$500 for the J-408R.

Philco, Model SS-4086 (Philco Corp., Philadelphia 34) \$320. Performance characteristics: cooking elements good; oven, good; broiler, poor with glass in place, fair with glass removed. The oven and control panel of this range were considered comparatively difficult to clean. ¶Model SS-3087, \$320, a 30-in. range, is similarly equipped. Models 3082, \$190; 4082, \$190; SS-3084, \$220; and SS-4084, \$220, have similar ovens but different type surface burner units.



An oven interior is easier to clean when the door can be removed as it could on the Admiral and General Electric ranges tested.

B-

Kelvinator, Model KRH-47 (Kelvinator Div., American Motors Corp., Detroit 32) \$260. Performance characteristics: cooking elements, oven, and broiler, fair. ¶Models KRH-43, \$190, and KRH-45, \$230, are similar.

Norge, Model ED-67 (Norge Sales Corp., Div. Borg-Warner Corp., Merchandise Mart Plaza, Chicago 54) \$350. Performance characteristics: cooking elements, fairly good; oven and broiler, fair. The glass window in the oven became too hot. ¶Models ES-67, \$220; and E-3620-VB, \$450, are similar. Norge model change-over time is such that the line of ranges available at the time samples were obtained for test may not be the latest available at the time of publication of this report. It is understood that the 1959 models will have a raised edge around the range top and will employ sealed heating elements for both baking and broiling. The Model ED-67 tested used an open-coil broiler element. In other major respects, new comparable models are expected to be similar.

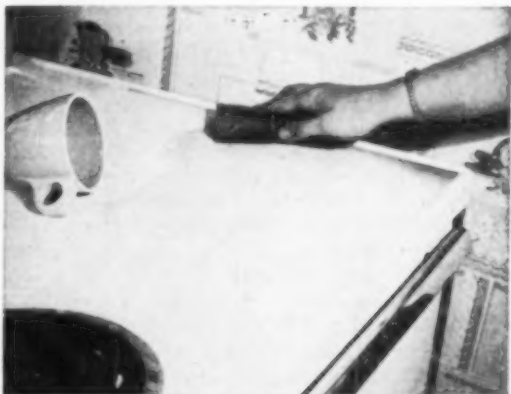
C. Not Recommended

Hotpoint, Model RC-301 (Hotpoint Co. Div., General Electric Co., 5600 W. Taylor St., Chicago 44) \$360. Performance characteristics: cooking elements, fairly good; oven, fair; broiler, good. ¶Models RC-101, \$240; RC-211, \$280; RC-401, \$425; and RC-601, \$595, are similar. Leakage current was excessive (see text).

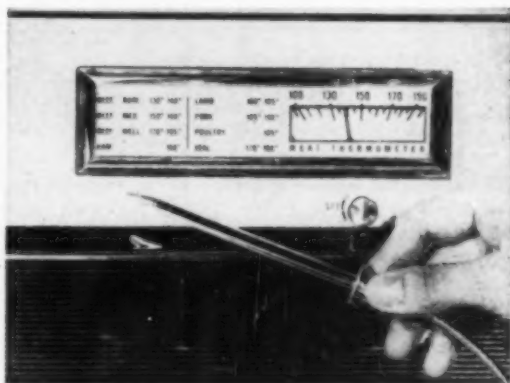
Westinghouse Ambassador, Model BL-40 (Westinghouse Electric Corp., Major Appliance Div., Mansfield, Ohio) Westinghouse does not set list prices on its electric ranges. Performance characteristics: cooking elements, poor; oven and broiler, fair. The top-of-range elements were removable, a noteworthy feature not present on the other ranges tested. ¶Models AL-40, CL-40, AL-30, BL-30, and CL-30 are similar. Leakage current was excessive.



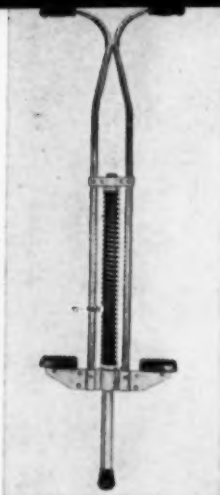
On some ranges it was necessary to reach over the tops of surface burners to reach the control knobs. This may often involve a hazard to the user.



The raised edge present on several of the ranges tested tends to catch minor spill-overs and prevents the liquid from running down the sides or front of the range.



A built-in meat thermometer was a feature of several of the ranges tested. The internal temperature of a roast is indicated on the control panel or an audible signal sounds when a pre-selected temperature has been reached.



Master Pogo No. 1000

Little Lady Electric Range Model 246



Recommended toys for Christmas

SALES of appliances and automobiles may be at an abnormally low level, but the toy industry expects a banner season this year. The annual show of this industry for dealers, held in the spring of 1958, enjoyed the largest attendance in five years. Fewer "deluxe" toys were shown than previously. Greater emphasis was placed on somewhat lower-priced and moderately-priced models of toys.

New toys offered this year include as usual, numerous dolls, games, cars, trucks, and mechanical toys. One of the fastest growing segments of the toy industry includes the hobby field. A large number of boat and airplane models in both kit and assembled form were shown. Educational toys also are being promoted in great numbers. The trend in youthful thinking to space travel and applied science is evident in the numerous kits and sets of rockets and electronic devices.

Parents should choose toys wisely, according to the age of their children. Electric trains and construction sets should be considered for boys over eight years of age, while girls of this age delight in imaginative play with doll houses, dolls and doll wardrobes, and carriages. Past the age of ten, children can begin to develop hobbies and to master mental and physical skills along the lines of their special interests.

Consumers' Research does not recommend the purchase of any toy that uses power from the house wiring system for any child under six years of age. In any case, be sure that such a toy carries the Underwriters' Laboratories' label, both on the toy and line cord (not on the power cord alone). Many toys for the younger set are operated by ordinary size D flashlight batteries, and thus cause no concern regarding shock hazard. Painted toys for children, and especially for babies, or for an older child in a home where there is a baby, should be purchased only if they carry

a label stating that the paint used is lead-free.

This year, CR obtained samples of toys which were deemed to be of special and timely interest and subjected them to various tests to determine whether they were suitable for recommendation. All the toys listed are *A. Recommended* for the approximate ages named and within limitations that are stated in some cases. These toys can be found in most toy stores, department stores, or hobby stores. Prices are list.

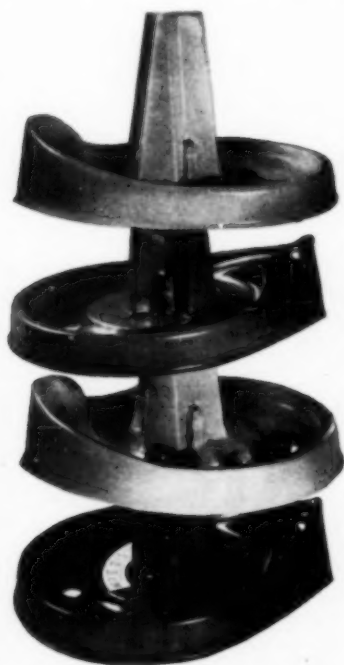
Magic Designer (Northern Signal Co., Inc., Saukville, Wis.) \$3.95. A clever toy which many parents will recognize by its former name of *Hoot-Nanny*. Well made



of heavy metal, this toy is well suited to all ages (adults included). By moving the control arms (the junction of which holds a pencil or ball pen) to different positions and then rotating a turntable upon which a paper disk

has been placed, the young geometrician can generate thousands of different designs (see illustration).

Marble Race (Dart Mfg. Co., Mason, Mich.) \$1.98. An inexpensive game that should occupy the attention of young children for some hours. Judging from the



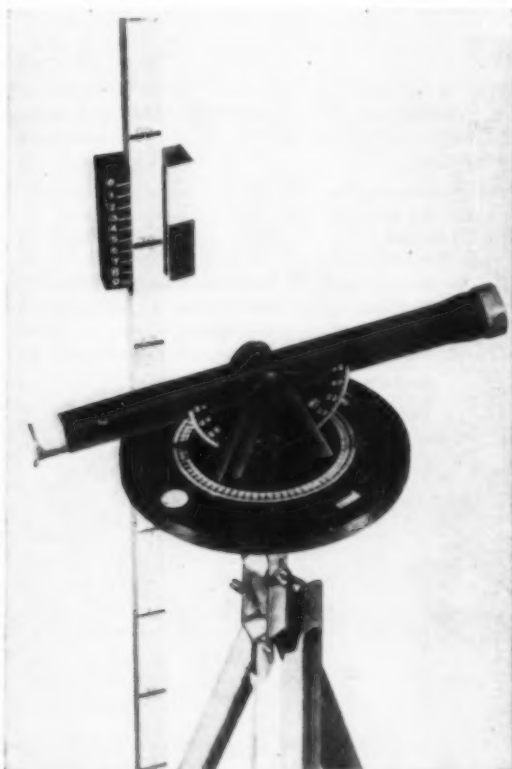
attraction it had for some of CR's staff, adults, too, will probably find it amusing. Four raceways made of unbreakable plastic are stacked on one another. Four or five marbles of different colors are started in the top section and they race down to the bottom, dropping from section to section through a hole which allows only one marble at a time to pass through. The object is to see which marble reaches the bottom first, and, as confirmed by CR's trial runs of the device, the starting order has little effect on the outcome.

Master Pogo, No. 1000 (Master Juvenile Products, Inc., Walker Valley, N.Y.) \$10. A de luxe pogo jumping stick, well made of steel, with an adjustable steel spring. Pogo jumping is recommended for children from 5 years of age and up. A good source of exercise, and should help to develop balance and coordination. Solid enough for an adult to use, but CR would recommend that Dad take lessons from junior before attempting to solo on this device.

Hand-ee Wrist Radio Set, No. 720 (Educational Electronics Co., 6322 N. Clark St., Chicago 26) \$4.98. The set includes a simple crystal radio (in a plastic case which has a wrist strap) and a Japanese-made hearing-aid-type earpiece. The antenna clip must be fastened to something which can act as an antenna, such as the finger stop on a dial telephone or an outside wire antenna.

Reception was limited to local stations only and even with those the volume was low. This set is only satisfactory as a toy, in which form it is promoted, and would not be suitable as a substitute for a regular radio receiver. Since there is no electric power needed, this toy is suitable for use by children about 5 years old and up. It is, of course, vitally important to observe the warning on the instruction sheet and not permit the antenna wire to be inserted into an electric wall receptacle or other device or appliance connected to the power line.

Kam-Kap Surveyor Set, No. 25 (Kam-Kap, Inc., 1107 Broadway, N.Y.C.) \$9.98. A good educational toy for boys (and possibly girls, too, if interested in mathematics and science) 12 years of age and up. Set includes a plastic transit on an adjustable tripod, tape, pegs, plumb



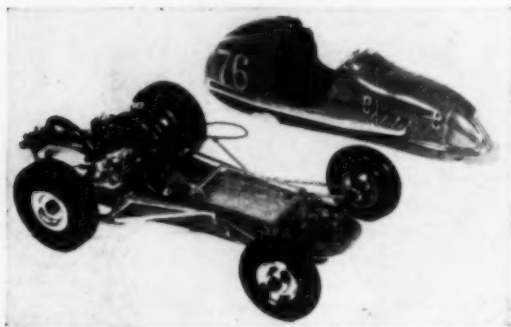
bob, and a metal sighting rod (stadia rod). Plastic lenses in the four-power scope weren't of particularly good quality, but they were good enough to permit a rough surveying job. An exceptionally well presented instruction book gives a basic surveying course and explains the minimum geometry and trigonometry used in simple surveying. Any child who has some knowledge of basic mathematics will have no trouble understanding the explanations in the book.

Li'l Stinker Biplane (L. M. Cox Mfg. Co., Inc., Box 476, Santa Ana, Calif.) \$8.95. The name of this model plane does not apply to its flying ability, for it was found



to be a very good flyer and its plastic construction made it almost indestructible. This 10-inch-wing-span plastic model is sold completely assembled and ready to fly. Its tiny engine has a piston displacement of only 0.020 cubic inches and is claimed to be the smallest engine made. CR's tests showed that the small size did not affect adversely the starting characteristics of the engine, for it started quickly and easily and ran smoothly, even after some rather rough and abrupt landings. These same landings had no damaging effect on the well-made plane. Suggested for boys 8 to 10 years old and up. *Caution:* The fuel is very poisonous and highly flammable and should be kept out of reach of younger children.

Motorjet Racer, No. 1495 (Cheminol Corp., 3340 Emery St., Los Angeles) \$16.95. This car is a scale model of a regular midget race car and is powered by a small (0.049 cubic inch displacement) internal combustion engine. The car is well made of cast aluminum. The engine, which is equipped with a recoil starter, is coupled to the left rear wheel through a centrifugal clutch and a tiny planetary transmission. The engine started easily and



the car attained a speed of about 18 miles per hour when traveling in a circle on the end of a 12-foot wire, the other end of which was anchored. Suggested for children 10 years or older. *Caution:* This car has an internal combustion engine and its exhaust contains carbon monoxide gas. *Do not run it indoors or in any other enclosed place.* The fuel is very poisonous and highly flammable and should be kept out of the reach of younger children. The instruction book and maintenance manual were suitably complete in both description and illustrations.

Atomotron (Atomic Laboratories, Inc., 3086 Claremont Ave., Berkeley 5, Calif.) \$9.95, less batteries. A miniature high-voltage generator patterned after the Van de Graaf generator. It is powered by two flashlight

batteries and on a dry day when the humidity is low and the aluminum sphere is fully charged a spark can be drawn from the sphere to a hand placed as much as 1 1/4 inches away. Since the amount of current present is extremely small, the spark discharge is not hazardous. A kit of six pieces is used to demonstrate many basic laws and principles of electricity and physics. The instruction book was well written and illustrated. The *Atomotron* is recommended for children of 8 to 10 years and older. Younger children will be fascinated by the effect but probably will not understand the principles being demonstrated.

Little Lady Electric Ranges (The Metal Ware Corp. Two Rivers, Wis.) *Model 232*, \$10; *Model 246*, \$15.95. For the little homemaker, these ranges will provide a



source of practical cooking experience as well as the thrill of actual baking on her own range. Each range has a thermostatically-controlled electric oven and a set of miniature assorted utensils. While the oven will bake, the surface "burners" do not get hot enough to do any cooking, but they do get hot enough to burn little fingers. Test of the ovens revealed temperature ranges of 380° to 475° on *Model 246* and 340° to 410° on *Model 232*. The outside surface got hot enough (150°F) to cause burns to little hands, hence the mother must counsel the child to use due caution. The stoves are powered by 115-volt alternating current and have the Underwriters' Laboratories' label and both passed CR's test for electrical safety. These toys are suggested for children 8 years or older. Younger children who are close to 8 years of age should be permitted to use one of these ranges only when mother is around to supervise. This should cause no great inconvenience, since the recipe book supplied suggests using a spoonful or two of mother's batter when she is baking. *Model 232* has no switches; *Model 246* has two panel lights and separate switches for top elements and oven.

Want to be "all shook up"?

WHAT is it that ails you?

"Sleeplessness, hypertension, circulatory deficiencies, and cartilaginous and bony overgrowths . . . multiple sclerosis, kidney disorders, fibrous swelling or infiltration in the interior of the body, accumulation of fibrous, cartilaginous . . . overgrowth of joint, chronic degenerative conditions, including arthritis and diabetes, sinus condition, muscular contractures, tumors, varicosities and eruptions, and hemiplegia"?

Well, maybe it isn't that bad. Maybe you don't have any of these diseases and disorders. Maybe you simply want to "reduce inches at home" "from your hips, tummy, legs, arms." Or if a man, to achieve a physique without "paunch."

You probably will have heard about or read about at least one of the many vibrating devices which have been sold with claims to treat these major and minor diseases and ailments.

One of the best-known names in the vibrator field is Niagara. Niagara appliances have been sold, in the past, at least, with claims of benefit in the treatment of several diseases, including those named above. The federal Food and Drug Administration has reported the filing of five "seizure actions" during the past eight years during which the government charged that a large number of Niagara devices were misbranded within the meaning of the law by false and misleading circulars and pamphlets and sellers' claims.

These devices were labeled in part Niagara of Adamsville, Pa., or shipped by the Niagara Mfg. and Distributing Corp., Adamsville, Pa. Some of them were hand units, others pillows. Some were portable devices, designed for resting the feet upon, or sitting or leaning upon. The actions were disposed of by either "consent" or "default" decrees.

Consumers' Research does not know of any controlled professional studies reported in the literature of the medical profession which would indicate that the vibratory-massage appliances have value in the treatment of disease. The Archives of Physical Medicine and Rehabilitation for December 1956 contains a report by three New York physicians on the effects of vibrating devices supplied by the Niagara Manufacturing and Distributing Co. that indicates that the vibrations had "little or no effect on temperature of and sodium clearance rate from muscle."

Recent advertising of Niagara units claims

"Vibrators make up the major part of our cases against misbranded devices. We believe they can and should be sold on the basis of truthful statements, without resort to false claims for reducing weight, eliminating worry, and alleviating disease conditions."

"One machine promoter claimed his device (a rigid cushion containing a small electric motor) would relieve menstrual cramps, backaches, headaches, hypertension, and nervous tension of the heart. According to expert medical opinion, the benefits of vibrators are limited to temporary relief for minor physical conditions. They may be soothing and relaxing to the user and help to relieve minor aches and pains due to fatigue or overexertion. They should not be represented as effective for treating diseases or weight reduction."

—Food and Drug Administration,
U.S. Department of Health, Education,
and Welfare

much less than did earlier advertising. The comparatively low-key copy now says that the device helps "decrease nervous tension and fatigue" and "encourage sleep." It also makes the point that the *Thermo-Cyclopad* units are not vibrators, but rather that the Niagara action is a "deep penetrating, gentle, soothing *cycloid* action" and "in no way resembles the tissue-damaging hammer strokes of a vibrator." Cycloid is a good word among mathematicians and engineers but will be understood by very few indeed of the customers for the devices, whether called vibrators or not. Consumers' Research wrote to Niagara Therapy Manufacturing Corporation asking for copies of the reports of "tests made by 'a prominent physicist in one of America's finest colleges' [which] prove that the patented action of Niagara . . . is a . . . deep penetrating, gentle, soothing *cycloid* action that is transmitted throughout the body." As this is written, a month later, no test reports have yet been received. (The Food and Drug Administration, in the cases cited earlier,

called the Niagara devices that were seized "vibrators.")

One selling program for vibratory units works in this way:

(1) The prospective buyer clips an advertisement out of a national magazine and sends it to the company asking for information.

(2) He or she receives literature by mail from a near-by local distributor, followed by a personal call from a salesperson.

(3) A demonstration (free) may be followed by a trial use for a rental fee (about \$50 a month). The rental fee can be applied to the purchase price, in one instance, about \$270 for a portable set (hand unit, \$75; pillow unit, \$170; case and tax). Some units sell for as much as \$400.

A dissatisfied consumer can return the machine but he will not get a refund of the amount paid as rental.

This failure to refund is typical of the vibrator industry; one should not expect to get one's money back if a vibratory or massage device is found unsatisfactory, even if it was judged by the family physician to be potentially injurious to the user's health.

Not all the heavily advertised devices are obviously pushed as "health units." There is, indeed, some question among merchandisers whether or not the devices should be sold in the surgical, small appliances, furniture, notions, or blanket section of a department store, or elsewhere. Some dealers frankly put them in a department, or several departments, which have a good deal of customer traffic.

Vibrating pillows, sofas, and mattresses are now available. A casual reading of the big mail-order house catalogs shows a wide selection of vibrating-massagers, vibrating-massage kits, massage pillows, massage pillows with heat, roller vibrators, vibrator pillows, vibrator lounges, vibrator box springs for beds, and vibrator "tables." There is—at the moment—a big business in such appliances.

The claims made for these devices are relatively mild, often vague and suggestive rather than asserting anything in particular. All too often the reader of the advertising literature reads into it things he wants to believe, that are not actually there. The mail-order discussion of the home massage table (\$290), for example, notes that "no disrobing is required for effective treatment; benefits both men and women" and goes on to say that while the table will help you keep the weight that is best for you, stubborn weight should have your doctor's attention. The table, however, is claimed to help "trim heavy hips, thighs, legs, 'spare-tire' midriffs to normal mea-

surements" and to help reduce tensions and promote an over-all feeling of well-being. The vibrator massage pillows are claimed merely to tone muscles and relax at low speeds, and to pep up circulation and "help contours" at higher speeds.

Makers of well-known "lounge chairs" had to join the procession and make "massage chairs." As one mail-order catalog notes, the "big, comfy lounge becomes 'massage chair' at flick of dial." Some loungers are available with a vibrator motor which jiggles the occupant of the chair at the "push of a button" and, depending on the nature of the floor and its supports, may vibrate everyone else in the room at the same time. Bedsprings are offered with a built-in vibrating unit which "agitates coil unit to give you quiet, soothing vibrating action" to help relax tired muscles. A timer can be set to keep you from vibrating more than 30 minutes.

A number of the vibrating devices of various makes have been seized by the Food and Drug Administration because of unwarranted sales claims or misbranding. Some of these are:

Healthmore Chairs, manufactured by the Wizard Manufacturing Co., North Hollywood, Calif., were seized at a Home Show in New Orleans, Louisiana. Placards at the show mentioned massage, deep penetration, circulation, and headaches. A leaflet was distributed, further recommending the chairs for rheumatism, arthritis, and related disorders.

Dynamic Vibrators, manufactured by Dynamic Manufacturing Corp., of Bronx, N.Y., in the possession of a distributor in Newark, Delaware, were seized because of unwarranted claims respecting arthritis, rheumatism, fibrositis, and weight reduction.

Slim Trim Vibra Pillows seized in Tampa, Florida, were misbranded with claims for stimulating blood circulation, relaxing nervous tension, increasing body nutrition, improving general metabolism, relieving aches and pains from arthritis, rheumatism, lumbago, fibrositis, and bursitis, and promoting and maintaining a general feeling of well-being.

Trim-tone, Models SX, I, A, and D, manufactured by the Figure-Tone Corporation, Knoxville, Tennessee, were seized in Jamaica, New York, and alleged to be misbranded because of claims regarding weight reduction, arthritic, rheumatic, and bursitis pains and conditions, and Model S seized in Des Moines, for claims regarding relief of nervous tension and physical aches and pains.

Relaxor Vibrator, manufactured by the Stantex Manufacturing Company, Chicago, seized in New York City and alleged to be misbranded because

of claims: relieves aching back, chases flabbiness, helps unsightly bulges.

Slim-Trim Electric Massage Pillow, Travel-Mate, Vibra-Therm, manufactured by Edson, Inc., Chicago, seized at Waterloo, Iowa, and alleged to be misbranded because of claims: reduce weight, relieve tension and tiredness.

Relax-Or Cushion, manufactured by Bon Bon Pillows, New York City, and seized in Minneapolis, Minnesota, alleged to be misbranded because of claims: "relax away tensions, pains, and inches."

Slenderoll Spot Reducer, manufactured by the Profile Slenderizing Salons, Northvale, New Jersey, and seized in Des Moines, Iowa, and alleged to be misbranded because of claims: reduces weight, provides deep penetration, muscle or tissue toning, reduces flabbiness.

The Food and Drug Administration notes that all but two of the cases they have brought in in their drive on devices in this field resulted in re-labeling to eliminate false claims. The most popular selling price for numerous makes of the vibrating pillows is about \$8, although pillows at \$5 to \$20 are available. Trade sources complain that some of the less expensive ones are merely "buzzing units" (alternating current buzzers). These units burn out, it is said, and then complaints come in. Some of the pillows are noisy, according to one dealer, and some have a disagreeable odor (possibly from the padding or cover).

A combination heating pad and pillow retails at about \$17, lounge chairs with a built-in wiggle sell at about \$150 and up. Consumers' Research bought three of the pillows: two vibrating pillows—one selling at \$5, one at \$11—and a combination vibrating pillow-heating pad at \$13. Two of the three were adequate in one respect, in that they passed the usual tests for electrical safety (leakage and breakdown voltage).

The question of Underwriters' Laboratories' approval of the devices is confusing to many. The Underwriters' Laboratories' label or the symbol *UL* on an electrical item or appliance indicates that specimens of the article have passed certain specifications with regard to electrical shock and fire hazards. The *UL* label does not imply quality or other aspects of utility or performance of an electrical appliance, or give any guarantee whatever that the devices will live up to the highly imaginative claims made for some of them by their manufacturers and sellers.

There is no reason to believe that these devices and many others too numerous to name here are harmful to normal, healthy adults—except to their pocketbooks. Some of the larger shaking tables and chairs can be a real burden to the



From the inside out, this vibrating pillow has (1) a vibrator unit, (2) a foam-rubber pillow split in the middle to hold it, and (3) a cotton corduroy cover. This pillow sold for \$5.

finances of many persons who can ill afford an appliance that promises health but cannot deliver. So far as reducing is concerned, Consumers' Research has seen no data of a scientific nature to support claims for effectiveness in reducing, and there is no reason to believe they could be effective. Weight reduction is best accomplished by a restricted diet, especially a reduction of fat, sugar, starches, beer, and sweets, which can be undertaken without so much expense. A great deal of *active* exercise, not the jiggling of a machine, is required for significant weight reduction through exercise.

One of the medical consultants of Consumers' Research notes, however, that he has seen cases of flabby, pendulous skin, caused by extreme mechanical manipulation by unqualified masseurs treating fat people. What happens is that the fat is detached from the associated tissues, leaving a space—and the serious cosmetic problem of what to do with it. Thus, vibration, if actually energetic enough to move the fat away from the tissues to which it is attached, may produce rather severe bodily harm. The same physician pointed out that while the devices may in some instances perform a useful service, you can do better by yourself at little or no expense, with simple old-fashioned exercise. The devices which vibrate and agitate can at most help the circulation a little, but not the muscles. For the muscles, there is no substitute for exercise.

* * *

In a future issue Consumers' Research will discuss electrical-pulse passive-exercise and "beauty care" devices which are being sold with claims similar to those made for the vibrating machines and pillows.

Letters from our readers

Automatic knitting machines

Do you have information concerning automatic hand knitting machines? I have been considering getting one of these machines in the hope of being able to make a little money at home.

Housewife, Utica, Kansas

► We have not tested home knitting machines and it would be our suggestion that you get in touch with the Home Economics Division of your State Extension Service. Perhaps they could be of some service in your problem.

Since you have in mind the purchase of a home knitting machine as part of a "homework" selling scheme, you will find it worth while to get in touch with the National Better Business Bureau, Chrysler Bldg., New York 17. Because there have been so many complaints of misrepresentation by salesmen of knitting machines, the NBBB has issued a bulletin on them. According to this report, the woman is to buy the knitter for a price up to \$300, plus financing charges. The scheme generally involves a promise to buy from her all the garments she can make, and sometimes to sell the needed yarn to her at 25 to 40 percent below regular price.

The NBBB warns that in some instances the promoter refuses to buy finished pieces because of their alleged unsatisfactory quality. Also, the yarn may be of an inferior grade that jams and snags the machine.

When the consumer then seeks to deal with the promoter, according to the report, it is sometimes found that he has discounted the note with a local firm, and cannot himself be reached any longer. For a number of reasons, it is often wise to check on the manufacturer or company distributing the machine before you buy.

LETTERS from our readers sometimes raise questions of importance to a great many others besides the inquirers. We plan to print these and other specially interesting letters, with our replies, from time to time as space in the BULLETIN permits.

In such cases, Consumers' Research advises the consumer to obtain a report or commercial reference on the firm from her bank. Banks will usually provide a report for a regular customer and one whose discretion can be trusted, either free or for a small fee, \$1 or \$2 or up to \$10 in some cases; this outlay will often be very much less than would otherwise be risked in buying from an aggressive and clever salesman.

Home projection screens

I am interested in a movie screen for 8 mm. movies and 35 mm. slides. I would like to read your most current report on them before buying.

Reader, San Clemente, California

► Regarding screens, those here who are experienced users of various makes of screens do not think there is sufficient difference between the well-known makes to warrant the expense and time required in making tests.

The important point in selection is

the type—beaded glass, plain white, or the new "Uniglo"-surface screens. Beaded screens give a brighter image than white screen for those sitting in front of the screen, but a much duller view for those sitting off to the side and viewing the screen at an angle. Screens with smooth "Uniglo" finish give a bright image over a wide angle of view and would, therefore, be preferable for those who project to an audience of such size that not all can sit within a fairly narrow angle in front of the screen.

Special spark plugs

I have received ads for spark plugs that are not called spark plugs, but are sold under a special name. Have these been brought to your attention before? I have checked myself and find that garage mechanics have run across these in use and find them very inefficient.

A reader, New York City

► A fancy name is supposed to appeal to people who are used to spark plugs but will suppose that something sold under another name would be new and better.

Spark plugs sold as spark plugs have done very well for a long time and served efficiently and without the possibility of a change in plugs from one brand to another producing any great improvement in engine efficiency, power, or miles per gallon.

We would not be inclined to give weight to a supposedly new kind of spark plug unless it were promoted by one of the leading spark plug companies which have contributed through research to scientific and engineering knowledge in this field.

Emendation to Consumer Bulletin

Combination refrigerator-freezers

Page 12, Col. 1, Aug. '58 Bulletin

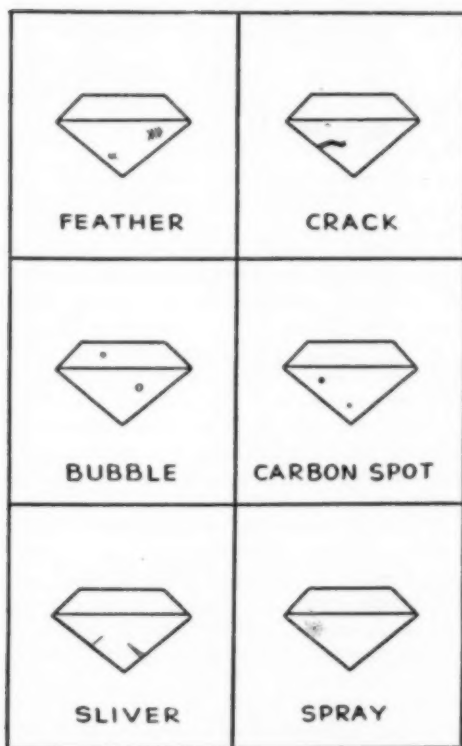
Change listing of *General Electric BH-12-RD1* from *B. Intermediate* to *A. Recommended*. The

occasional defect in production which permitted particles of glass wool to fall into the freezer space has been corrected by a change in the design of a bracket in the freezing compartment of the appliance.

STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (Title 39, United States Code, Section 233) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF Consumer Bulletin published monthly at Washington, N.J., for September 1957-September 1958. 1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Consumers' Research, Inc., Washington, N. J.; Editor, F. J. Schlink, Washington, N. J.; Managing editor, none; Business manager, Charles D. Cornish, Washington, N. J. 2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual member, must be given.) Consumers' Research, Inc., a non-profit corporation, not a business enterprise, not operated for profit; Washington, New Jersey. Stock, none. 3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None. 4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. C. D. Cornish. Sworn to and subscribed before me this twelfth day of September, 1958, Elizabeth B. Smith [Notary Public]. (My commission expires July 31, 1963.)

Buying your first diamond?

(The beginning of this article is on page 2)



The most common flaws (inclusions) found in diamonds (enlarged to show detail). Many flaws are so tiny that they are not visible to the naked eye. The size of the flaws, and their location, affect the value of the stone.

ter, and seldom is the result properly termed "perfect cut." Often, too, the cutter saves as much of the diamond as possible in order to achieve maximum weight, and must sacrifice perfection in cut in doing so.

A perfectly proportioned diamond has a depth of about 60 percent of the diameter of the stone, and of this 60 percent, about 16 percent is above and about 44 percent below the girdle (the extreme outside edge). The table (the octagon in the center of the top of the diamond) is about 53 percent of the diameter at the girdle. The culet (the bottom of the stone) should be closed so that the stone comes to a point.

Perfection in cutting is found even less often than flawlessness in diamonds. The diamond you will buy will vary from the proportions given, in all probability, but you still can get a beautiful diamond and not have to pay the additional re-

quired for the maximum perfection of cutting. If the cutting deviates too greatly from the best possible, however, it will affect the brilliancy too much. The diamond then is worth less than a stone more perfectly cut.

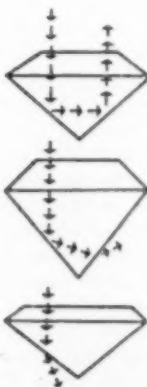
All well cut round diamonds have 58 facets and are called "full cut." The small diamonds used to embellish a setting, and those used in the wedding ring, usually have only 18 facets and are called "single cut."

What is meant by the term "Eye Perfect"? While this term is used to give the impression of very high quality, it really means that the stone is imperfect, but not to the degree that the defects are visible to the unaided eye. Flawlessness in diamonds should be gauged with a 10-power magnifier and not by the naked eye. Be on your guard when the term "eye perfect" is used.

What is meant by "Blue White Perfect"? Very few diamonds merit this loosely used term. The Federal Trade Commission, in a booklet recently issued, clearly indicates that no diamond may be called "Perfect" which discloses any flaws, cracks, carbon spots, or other blemishes or imperfections of any kind, when examined loose, before it is set, by a trained eye using a 10-power magnifier. Further, that even for a diamond showing no flaws of any kind, the term "perfect" should not be used if the stone is of inferior color or cutting.

"Blue White" is a term also discouraged except in rare cases. In commercial parlance, what it usually means is a white, or colorless diamond, for very few diamonds have blue in them.

Color is possibly the most important factor in a diamond. Two stones, each weighing one carat, and of the same quality in clarity and cutting,



Top—This shows how the light in a properly cut diamond enters and is reflected from the facets and goes back through the top to produce the brilliant effect of a fine diamond

Center—This stone is cut too deeply—typical of older cut diamonds. The light is reflected in part to opposite facets at an incorrect angle, allowing some to be lost through the sides.

Lower—This is a shallow cut stone. Diamonds are often cut in this way to make as large an appearance as possible for a given weight of stone. A good deal of the light is entirely lost, as it is not reflected, and it "leaks" through the lower part of the stone.

can vary in purchase price by hundreds of dollars because of difference in color. Most diamonds have some yellow in them, but the less yellow present, the more valuable the stone. Color is difficult for the average man to judge, as diamonds pick up the color of their surroundings. Be sure to question the true color of a stone that is shown under a blue lamp; make it a point to see it also in a different environment and under different lighting.

Some jewelers show diamonds loose. This is very much to your advantage for in this form there is no chance of concealment of a flaw (which might be covered by a prong and not be noticed). More important, many diamonds when they are faced up will show a much better color than when they are turned over. The stones that show a change of color are less valuable than those which have good color from all angles.

Take time to shop around. Don't be afraid to ask the jeweler to let you use his 10-power gem magnifier. This is your privilege. It may take a little time to get the proper focus, but once you have it, your education in diamonds will progress rapidly. Don't be surprised at the variations in the information which you will receive, and don't be backward about asking questions. Your shopping will be interesting, and you will be better satisfied with your final selection, if you will seek answers to the questions that occur to you.

Is it best to buy a round (brilliant cut) diamond, an emerald cut, a marquise style, or other fancy cut stone? Unless your fiancée has expressed a preference, it is usually more satisfactory to buy a round-cut stone. In the smaller sizes such a stone is more brilliant and makes a better showing. In the larger sizes it is simply a matter of individual personal taste.

Is it true that a diamond may be chipped, cracked, or otherwise injured? Yes. Though it is the hardest mineral in the world, a diamond can be damaged by a sharp blow against a hard object. The jewel should be treated with care. Most instances of damage are the result of careless handling by people who believe that a diamond is so hard that nothing can hurt it.

What type of mounting should you buy? It's best to keep in mind that the main value of your purchase lies in the center stone and the setting should not be too costly in proportion to the value of the center diamond. Of course, a beautiful setting does much to enhance the over-all appearance of the ring, but you won't go far wrong if you see that no more than one eighth to one fourth of the value of the entire ring goes into the setting.

Should you get a gold or platinum setting? Gold is less expensive, wears satisfactorily, and the value is more in keeping with the value of

**SAVE
\$31**

**COMPARE
VALUES**

**New
York's
Largest
Diamond
Display**



1/3 CARAT 5 GENUINE DIAMONDS

Regularly \$120
Now Only

\$89

**\$2.50 DOWN
\$2 WEEKLY**

Newest and brightest of all, beautiful delicate beauty with five sparkling genuine diamonds. Total weight, 1.00 ct. \$9. illus. enlarged for detail.



One needs to be wary of "bargains" in diamonds. The arrow (not in original ad) points to the important information in small type.

the average diamond purchased. White and yellow gold mountings are beautifully styled today. Platinum settings should as a rule be considered only for unusually expensive diamonds.

Are diamonds a good investment? The jeweler is frequently asked this question. You probably could not get your cost out of one if you wanted to sell it. But, on the other hand, because diamonds do not deteriorate or lose their brilliancy, they will always have substantial intrinsic value recognized everywhere in the civilized world. Many people in an era of diminishing value of currency do buy diamonds and other precious gems in order to diversify their holdings. This can be advised only for those who can well afford to make the outlay, and for those who have sufficient knowledge and experience to be sure of getting good quality and value for their money.

And now a word of caution. As in many other trades and professions, there are in the jewelry industry many highly ethical and honest merchants; also, there are some who are unethical and dishonest, who do not hesitate to take advantage of the consumer's lack of knowledge of diamonds, of which they are well aware.

Be wary of "bargains" in diamonds. Real bargains are few and far between. Take the claims of "wholesale prices," "huge discounts," "regularly \$200," and other similar advertising with a grain of salt. Don't be misled by heavily "blown up" pictures of rings or brooches in advertisements in papers or magazines. You may be surprised when you see the actual merchandise. Be sure to note whether there is an explanation in fine print that notes that the diamonds are enlarged "just to show detail."

Ask your Better Business Bureau, if there is one in your city, about the authenticity of "Close Out Sales," "Half Price Sales," "Removal Sales," and what to expect from some jewelry auction sales.

To sum up—to get the best possible value for the lowest price, it will pay you to shop around and compare.

Off the editor's chest

(The beginning of this article is on page 34)

name of a new, weird, wonderful, incredible ingredient makes its appearance, write it down, together with the name of the product containing it. He finds this project more fun than collecting postage stamps. For the benefit of his fellow advertising men, he points out that it is time the advertising agencies and advertisers woke up to the absurdity and waste of the "magic ingredient" pitch. He notes that, with some 25 miracle ingredients being plugged on the air every night, marketing experts do not need a survey to discover that this particular technique can lead only

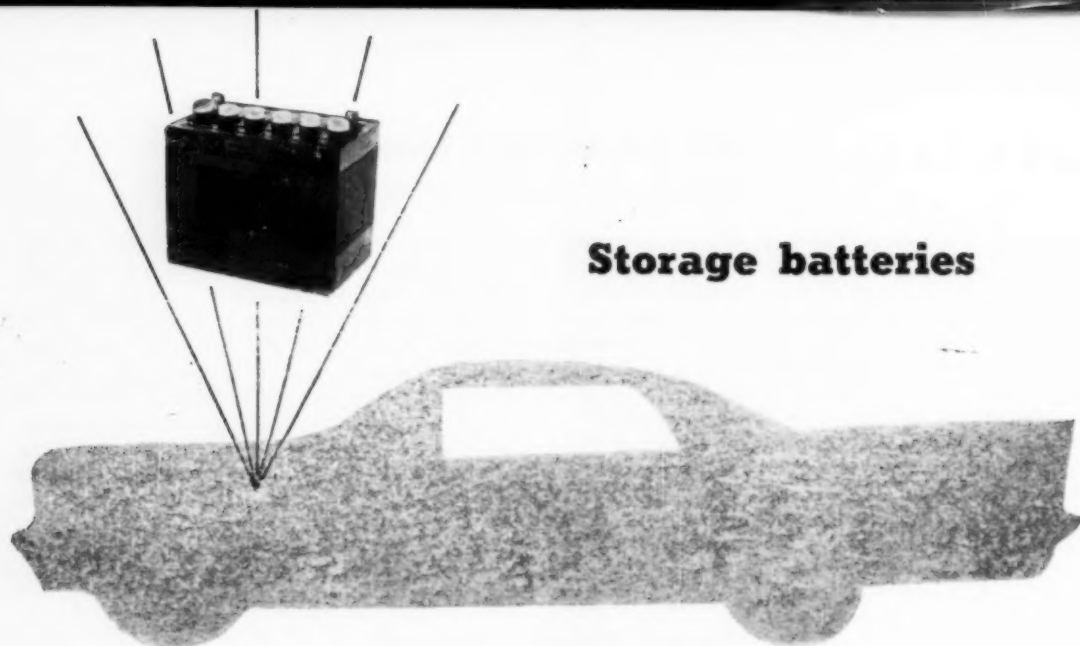
to audience confusion, suspicion, and distrust.

In addition to playing "list the miracle ingredient" game, it might be enlightening for consumers to write the manufacturer or distributor of the product advertised to ask just what this magic substance actually is and what scientific proof is offered for its claimed performance. As a matter of fact, this sort of thing could be a very educational project for college students in marketing, advertising, retailing, and other subjects to take on as a class project. We should like to see some of the answers to such letters.

Abbreviated index of articles in Consumer Bulletins

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Storage batteries

If you have a heavy load of current-consuming accessories on your car, not even the best of batteries will last as long as you would wish

SOME COLD MORNING this winter you may get into your car, turn on the ignition to start the motor, and instead of the customary roar, all you will hear is a "clunk," or maybe not even that, but just a moment of dead silence. You won't be alone in your trouble, for your neighbor down the block, in fact more than 12,000,000 of your "neighbors" around the country, will have battery trouble during the year. Frequent battery failure is not due to the adoption of the 12-volt ignition systems now in use on all American cars, and it cannot always be blamed on a battery of poor quality. It has occurred in many instances because your battery was just not able to keep up the daily grind of supplying current for the multiplicity of accessories on your car, such as headlights, taillights, back-up lights, hood ornament lights, heater, horn, radio, cigarette lighter, starting motor, automatic window lifts and seat adjusters, air suspensions, torsion levelers, door locks, fuel pump, air conditioning, and convertible top. Quite a list and that's not all the gadgets and devices some people may have on their cars. Indeed, it was stated in a recent issue of the Society of Automotive Engineers Journal that the average continuous load on an automobile battery *has more than doubled since 1950*. The problem of the battery manufacturer and his customers is therefore an increasingly difficult one.

The ability of a battery to give a reasonable

service life is based upon several inbuilt characteristics which determine the amount of electric current it can supply, and the length of time it can continue to supply current. To indicate this capability, the manufacturer embosses on the case the number of ampere-hours the battery should supply during a 20-hour period while still maintaining a useful voltage at its terminals. Typically, for 12-volt batteries, this value will vary from 45 to 70 ampere-hours, depending upon the make and grade of battery you buy. If you have experienced frequent need for battery replacement, it's likely that you have been buying batteries with insufficient capacity.

When you buy a new battery, you should take certain precautions before accepting delivery, whether the battery be one of the newer dry-charged type or the older type with the electrolyte already in the battery. First, have the dealer check all the cells with a hydrometer and make sure all cells have a specific gravity of at least 1.250 to 1.260 and that all read about alike. If the battery is cold, a correction is needed to allow for the temperature difference, about .010 for each 25 degrees of temperature change below or above 80°F. Your dealer has a chart or table that enables him to make this correction. Second, have the voltage of each cell checked under load with a load-resistor type of cell tester. Each cell should give a reading of approximately 2.1 volts

and the voltage readings for the cells should agree within 0.1 volt. Third, make sure the dealer fills each cell of a new battery with distilled water (or with the correct electrolyte, if a dry-charged battery) to the correct level.

The newer batteries of the dry-charged type offer one certain advantage to the consumer which is likely well worth the slightly higher price charged for these batteries. A wet storage battery must be kept on charge on the dealer's shelf and, if he keeps it in stock for any considerable time, a substantial part of its useful life may have been expended even before you buy it. A dry-charged battery, on the other hand, will not supply current until the dealer adds the electrolyte just before he puts the battery into your car. Because it is stored dry, it keeps its charge for a much longer time and it is only necessary, usually, for the dealer to give it a short booster charge just before installing it in your car.

Battery guarantees

About three years ago, Consumers' Research ran an article on storage batteries (November 1955 BULLETIN) in which we indicated that the average consumer would be well advised to purchase his replacement battery on the basis of cost per month, which was to be calculated essentially by dividing the cost of the battery by the length of the guarantee in months. Thus, the approximate replace-

ment cost per month for a \$30 battery guaranteed for 24 months is $30 \div 24$ or \$1.25. At that time, the method of choice was considered to be a reasonable one, because battery guarantees were not too far out of line with the life of a battery. With the ever increasing loads on batteries, however, and the increasing lengths of guarantees brought about through competitive emulation to attract customers (without corresponding real inbuilt increases in battery capacity), many people have found that a battery guaranteed to last for 36 months actually lasted only 18 months, perhaps even less. And because the 12-volt batteries sometimes give little or no indication when they are about to fail, these same people were often greatly inconvenienced, or their safety perhaps endangered, when their battery, with its 36-month guarantee, failed long before the time expected.

It appears that today the guarantee on a battery gives but slight indication of its life expectancy or of its real capability to do its job. The 18-, 24-, 36-, or 48-month guarantee appears more likely to be a figure—calculated by the accounting and statistical departments of the manufacturer, rather than the engineers—which will provide a reasonable profit to the company when the sale and allowances on turn-in of thousands of batteries are considered. Also taken into account is the fact that, while a large number of batteries



An hydrometer is the instrument most commonly used to check the state of charge of a storage battery. Be sure that, if this test is made by a service station man, he checks the state of charge before adding needed water to the cells.



A cell tester is used to find weak or nearly dead cells in a battery. It provides a more reliable means for judging the condition of each separate cell in a battery than that afforded by the hydrometer.

will fail before the end of the guarantee period, their owners will not care to go to the trouble of collecting on them for the remaining months of service that are due the purchaser.

Consumers' Research decided to test a group of 12-volt storage batteries of several well-known brands in order to determine which batteries might be expected to perform their intended functions and do so for a reasonable length of time.

Batteries are usually rated in two different ways by the manufacturers; the ratings are imprinted or molded on the battery case. One rating indicates the number of ampere-hours a battery can supply when discharged at a steady rate over a 20-hour period. A 12-volt battery rated at 50 ampere-hours should be capable of furnishing a current of 2.5 amperes for 20 hours ($2.5 \times 20 = 50$) while maintaining a satisfactory voltage at its terminals. A battery rated at 60 ampere-hours will furnish 3.0 amperes under the same conditions. Thus, the 60-ampere-hour battery should have a longer life than the 50-ampere-hour battery if both are to be used on the same car, and its life will be longer whether or not the car has a multitude of accessories which require electric current for their operation, so long as both batteries are used under the same conditions. If you have a good many modern accessories, however, you will be well advised to buy the battery

with the larger capacity, for still another reason.

One has merely to notice the long, slow-moving lines of traffic in and around any urban area on a Sunday afternoon during the summer or during stormy winter weather to realize that a great many of our cars are not traveling at normal road speeds all the time. Thus, when one is caught in a traffic slow-up, the car engine does not turn over fast enough to continue charging the battery. As a result, current is drawn from the battery faster than it is replaced, and the battery becomes discharged. The life of any lead-acid battery is shortened considerably unless the battery is kept in a fully-charged or nearly-charged condition. Obviously, the larger battery has an advantage for this severe type of service with periods of undercharging, for it has more reserve capacity.

A second way in which batteries are rated is a measure of their ability to start a car under severe cold-weather conditions.

In the test which simulates this type of service, the time in minutes is measured during which the battery (cooled to 0°F) will supply 150 amperes of current and maintain a satisfactory voltage at its terminals. The times under this load and temperature are fairly short, for the capacity of a battery on a zero day is only about 40 percent of its capacity on a warm summer day, and 150 amperes is a very heavy load. A glance at the table shows that the batteries tested varied considerably in this respect. If the *Firestone* and *Wizard* batteries are compared, for example, it will be noted that the *Firestone* had 40 percent more winter-weather starting capacity. On a cold winter morning, with a hard-starting car, you might expect to get started to work with the *Firestone*, and perhaps not with the *Wizard*. Differences in the monthly cost of a battery based upon the number of months the guarantee is to run become unimportant in such a situation.

Those who have purchased batteries for many years will likely note that in the past few years the specific gravity of the electrolyte used in batteries has been reduced from 1.280-1.300 to 1.255-1.265 on many brands. This change has been made in order to increase battery life by reducing the tendency for a battery to self-discharge due to "local action" on the plates. The manufacturers felt that the slight reduction in winter-starting ability and capacity were less important than the gain in battery life achieved by use of lower-density acid. It is Consumers' Research's guess that it will soon be necessary to bring the specific gravity figure back to its previous value for batteries sold for use in cold climates, if cars continue to get bigger and carry still more electrically operated gadgets, even if a shortened service life must go along with the change.



The rated capacity of a battery should be embossed on its case. The information on the Allstate battery shown was complete in this respect; unfortunately, as it happened, the battery failed to live up to some of the claims made.

Some specifications and test results of the batteries tested

Brand	No. of plates	Guarantee, months	Rated capacity, amp.-hr.	Capacity, amp.-hr.* (20-hr. rate)	150-amp. discharge rating, minutes**	150-amp. discharge, minutes*
Allstate	54	30	53	44.5	4.1	3.6
Atlas	60	36	55	48.2	4.4	5.6
Auto-Lite	54	24	55	50.7	3.7	5.2
Delco	54	30	53	54.5	3.7	5.2
Exide	54	36	53	50.3	4.0	5.1
Firestone	66	36	55	56.0	4.4	5.6
Ford	66	36	55	54.5	•	4.3
Wards	54	30	50	39.8	3.8	4.5
Willard	66	24	55	49.1	4.4	4.9
Wizard	66	36	55	53.8	•	4.0

* Average for 2 runs each on 2 samples.

** A measure of cold-weather starting capacity—see text.

• Unknown.

Some grease painted around the battery terminal posts or an oiled felt washer placed on them and below the cable connectors will tend to reduce deposits of salts and corrosion products; these deposits are undesirable because they furnish a leakage path for a continuous slow unwanted discharge of the battery when it is not in use.

The batteries are rated on the basis of agreement of test results with the rated capacities given on the batteries. Batteries marked f were ones purchased as suitable for use as replacement batteries in Ford cars. Batteries marked c.p. were for replacement in Chevrolet and Plymouth cars.

The batteries are listed in alphabetical order within the A-, B-, and C-rated groups.

A. Recommended

Delco (Delco-Remy Div., General Motors Corp., Anderson, Ind.) (c.p.) \$29.95. 30-month guarantee. Replacement cost per month, \$1 (see text). Capacity on 20-hr. normal load test, satisfactory. Winter-starting capacity, excellent.

Firestone 28N (Firestone Tire & Rubber Co., Akron, Ohio) (f) \$31.75. 36-month guarantee. Replacement cost per month, 88c (see text). Capacity on 20-hr. test, satisfactory. Winter-starting capacity, excellent.

Ford (Ford Motor Co., Detroit) (f) \$29. 36-month guarantee. Replacement cost per month, 81c (see text). Capacity on 20-hr. test, satisfactory. Winter-starting capacity, fair.

B. Intermediate

Atlas Type A-24 (Esso Standard Oil Co., 15 W. 51 St., N.Y.C.) (f) \$30.25. 36-month guarantee. Replacement cost per month, 84c. Capacity on 20-hr. test, low. Winter-starting capacity, excellent.

Auto-Lite 11M555 (The Electric Auto-Lite Co., Toledo 1, Ohio) (c.p.) \$28.95. 24-month guarantee. Replacement cost per month, \$1.21 (high). Capacity on 20-hr. test, only fair. Winter starting capacity, excellent.

Exide Sure-Start 25M (Electric Storage Battery Co., Cleveland 1) (c.p.) \$28.95. 36-month guarantee. Replacement cost per month, 80c. Capacity on 20-hr. test, only fair. Winter-starting capacity, excellent.

Willard Heavy DeLuxe (Willard Storage Battery Co., Cleveland 1) (f) \$31.95. 24-month guarantee. Replacement cost per month, \$1.33 (highest of all in the group tested). Capacity on 20-hr. test, only fair. Winter-starting capacity, good.

Wizard 28N (Western Auto Stores) (f) \$20.95. 36-month guarantee. Replacement cost per month, 58c (lowest of all in the group tested). Capacity on 20-hr. test, satisfactory. Winter-starting capacity, comparatively low.

C. Not Recommended

Allstate 61 (Sears, Roebuck & Co., Chicago) (c.p.) \$17.95. 30-month guarantee. Replacement cost per month, 60c. Capacity on 20-hr. test, very low. Winter-starting capacity, very low, comparatively.

Wards (Montgomery Ward & Co., Chicago) (c.p.) \$18.45. 30-month guarantee. Replacement cost per month, 61c. Capacity on 20-hr. test, very low. Winter-starting capacity, satisfactory.

● OFF THE EDITOR'S CHEST

What new miracle ingredients

appeared on your TV screen this week?

IT'S NEW! It's amazing! It's a miracle! It may be tooth paste, toilet soap, cleaning powder, a face cream, or a home remedy, but, whatever the product, some "magic" ingredient will be extolled over the air, on TV, or in a multicolored advertisement, as a compelling reason for buying a particular brand. One advertising man reports that "more than 25 different, odd-sounding ingredients are being plugged on the air every viewing or listening night."

Whether the substance in question has real merit is a matter that is not always easy to determine. Studies have indicated that hexachlorophene, a mouth-filling name for the chemical 2,2'-methylenebis (3,4,6 trichlorophenol), in *Dial* soap and a number of other products, is really effective in helping to control perspiration odor. The spectacular success of *Dial* has stimulated a number of firms to follow its example in including a bacteriostat in soap. Its best-known competitor is Lever Brothers' *Lifebuoy*, which contains *Puralin*, a coined name for tetramethyl thiuram disulfide.

Another widely featured name for a common chemical is *Irium*, which has been played up for some 20 years in the advertising for *Pepsodent* tooth paste and tooth powder. The name of this substance will not be found in chemical dictionaries, but by studying the package carefully, it is possible to discover that *Irium* is sodium lauryl sulfate, a well-known synthetic detergent.

Tooth pastes and tooth powders are two types of products that seem to require a special ingredient or magical substance for an effective advertising campaign. At one time, there was quite a vogue for ammoniated dentifrices in which the magic substances were ammonium phosphate and urea. Later, the fashionable ingredient was chlorophyll. That was followed by the so-called anti-enzymes. The two anti-enzymes that have been approved by the Food & Drug Administration as safe for use in dentifrices are sodium dehydroacetate and sodium N-lauroyl sarcosinate. Colgate's featured ingredient, *Gardol*, in its tooth paste is sodium N-lauroyl sarcosinate. Listerine's *Antizyme* is sodium dehydroacetate. Procter & Gamble's *Gleem* also contains an anti-enzyme.

The extravagant claims for dentifrices that appear to endow them with extraordinary virtues they do not possess have come in for severe criticism from the American Dental Association and

have even been the subject of a congressional inquiry. According to an expert witness before the House Committee on Government Operations, there is no scientific basis for any claim implying that a dentifrice has preventive or curative qualities. It should be considered merely as an adjunct to the toothbrush and secondary to it.

In another field, there is *Rinso* with *Solium*. Lever Brothers' fancy name for a fluorescent dye that acts as an "optical bleach." As a matter of fact, "startling, new ingredients" make their appearance in detergent-soap advertising so frequently that one of the chemical trade journals has suggested it does a product more harm than good to have "miracle" properties claimed for it. When the lady of the house discovers that it has no particular advantage or perhaps even has some disadvantages in its performance, she is likely to be more than a little disillusioned.

The technique of the "magical" ingredient apparently has such a potent attraction to advertisers—and to the non-scientific public—that it is doubtful if even a congressional inquiry will have any effect in restraining its use. Some advertisers, however, appear to recognize a certain skepticism on the part of consumers in regard to advertising abracadabra. They feature an impressive ingredient but give its common name, or describe its general nature. In the advertising for *Comet Cleanser*, for example, "fortified with *Chlorinol*," an asterisk directs the observant reader's attention to fine type at the bottom of the page which explains that "*Chlorinol* is Procter & Gamble's trade-mark for its special bleaching, cleansing, and disinfecting chlorine compound . . ." Colgate handles its definition of *Gardol* in similar fashion. The definition of *Irium* appears on the *Pepsodent* label.

Something may perhaps be said for the advertiser who wants to individualize his product by a special feature, if he gives the chemical name of the ingredient. In that event, the inquiring consumer can find out just what he is being sold by looking up the product in a good chemical encyclopedia or dictionary or other chemical reference work at the public library, or can ask some chemist friend.

One advertising critic suggests that an interesting game can be played by keeping a notebook handy—near the television set; every time the

(Continued on page 29)

Ratings of Current Motion Pictures

THIS SECTION aims to give critical consumers a digest of opinion from a wide range of motion picture reviews, including the motion picture trade press, leading newspapers and magazines—some 19 different periodicals in all. The motion picture ratings which follow thus do not represent the judgment of a single person, but are based on an analysis of critics' reviews.

The sources of the reviews are:

Boxoffice, Cue, Daily News (N. Y.), The Exhibitor, Films in Review, Harrison's Reports, Joint Estimates of Current Motion Pictures, Motion Picture Herald, National Legion of Decency, Newsweek, New York Herald Tribune, New York Times, The New Yorker, Parents' Magazine, Release of the D. A. R., Preview Committee, Reviews and Ratings by the Protestant Motion Picture Council, The Tablet, Time, Variety (weekly).

The figures preceding the title of the picture indicate the number of critics whose judgments of its entertainment values warrant a rating of A (recommended), B (intermediate), or C (not recommended).

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

Descriptive abbreviations are as follows

ad—adventure
biog—biography
c—in color (Anso, Eastman, Technicolor, Trucolor, Warner Color, etc.)
car—cartoon
com—comedy
cri—crime and capture of criminals
doc—documentary
dr—drama
fan—fantasy
hist—founded on historical incident
mel—melodrama
mus—musical
mys—mystery
nov—dramatization of a novel
rom—romance
sci—science fiction
soc—social-problem drama
trav—travelogue
war—dealing with the lives of people in wartime
wes—western

A	B	C	
—	4	1	Age of Infidelity (Spanish).....dr A
1	5	1	Andy Hardy Comes Home.....com AYC
—	3	12	Another Time, Another Place.....dr A
—	3	2	Apache Territory.....wes-c AYC
—	2	2	Appointment with a Shadow.....cri-mel AY
—	1	3	Astounding She Monster, The.....sci AY
—	1	7	Attack of the Fifty Foot Woman.....sci A
—	3	1	Attack of the Puppet People.....mel AYC
—	4	5	Attila (Italian).....hist-mel-c AY
2	6	3	Badlanders, The.....wes-mel-c A
—	3	4	Badman's Country.....wes AYC
—	3	1	Big Barrier, The (German).....dr-c AY
4	5	—	Big Country, The.....wes-c AY
—	2	2	Bigamist, The (Italian).....com A
—	5	2	Blob, The.....sci-mel-c AY
—	2	7	Blood Arrow.....mel AY
—	5	4	Blue Murder at St. Trinian's (British).....com AY
—	3	5	Bonnie Parker Story, The.....cri-mel A
1	13	3	Bravados, The.....wes-c AY
—	6	—	Buchanan Rides Alone.....wes-c AYC
—	4	3	Bullwhip.....wes-c A
—	6	6	Camp on Blood Island, The (British).....war-mel AY
—	5	2	Captain from Koepenik, The (German).....com AYC
—	7	3	Case Against Brooklyn, The.....cri-mel AY
1	12	2	Case of Dr. Laurent, The (French).....dr A
2	4	2	Cat on the Hot Tin Roof.....dr-c A
—	5	9	Certain Smile, A (French).....nov-c A
—	4	3	China Doll.....war-dr A
—	2	2	Circus of Love (German).....mel-c A
—	6	1	Cole Younger, Gunfighter.....wes-c AYC
—	2	7	Colossus of New York, The.....sci-mel AY
—	1	3	Cool and the Crazy, The.....soc-dr A
—	5	4	Cop Hater.....cri-mel A
—	9	2	Count Five and Die (British).....war-mel AY
—	3	4	Country Music Holiday.....mus-com AYC
—	2	1	Crazy in the Noodle (French).....com A
2	1	3	Crime and Punishment (French).....dr A
3	10	3	Cry Terror.....mys-mel A
—	3	3	Cry-Baby Killer, The.....soc-mel A
—	3	1	Curse of the Faceless Man.....sci AY
1	3	—	Damn Yankees.....mus-fan-c A
—	3	—	Dangerous Exile (British).....hist-dr-c AY
—	2	6	Dangerous Youth (British).....soc-mel AY

A	B	C	
—	2	5	Deadly Decision (German).....war-dr A
2	6	2	Defiant Ones, The.....soc-dr A
—	—	10	Desert Hell.....mel AYC
—	—	3	Diary of a Bad Girl (French).....dr A
—	2	4	Dragstrip Riot.....soc-mel A
1	7	4	Dunkirk (British).....war-dr AYC
—	1	9	Edge of Fury, The.....cri-dr A
—	3	4	Fiend Who Walked the West, The.....cri-mel A
—	3	8	Fiend Without a Face (British).....sci-mel A
—	3	—	Fire Under Her Skin (French).....dr A
—	2	5	Flame Barrier, The.....sci-mel AY
—	1	6	Flaming Frontier.....wes A
—	2	1	Flesh and the Woman, The (French).....dr-c A
3	7	2	Fly, The.....sci-mel-c A
—	1	3	Flying Classroom, The (German).....com AYC
—	2	4	Folies Bergère (French).....mus-mel-c A
—	—	3	Forbidden Island.....mys-mel-c A
—	6	2	Fort Massacre.....mel-c AYC
—	3	3	Frankenstein—1970.....sci-mel A
1	6	4	Fraulein (German).....war-dr-c A
2	11	1	From Hell to Texas.....wes-dr-c AYC
—	2	6	Gang War.....cri-mel A
—	3	4	Ghost of the China Sea.....war-mel AYC
—	2	2	Giant from the Unknown.....sci-mel A
—	4	—	Gideon of Scotland Yard (British).....mys-mel-c AYC
7	9	—	Gigi.....mus-dr-c A
—	—	10	Girls on the Loose.....cri-mel A
—	9	7	Goddess, The.....soc-dr A
1	7	10	God's Little Acre.....dr A
—	1	2	Golfo (Greek).....dr A
—	4	1	Guendalina (Italian).....dr A
—	3	1	Gun Runners, The.....mel AY
1	8	2	Gunman's Walk.....mel-c A
—	4	2	Gunsmoke in Tucson.....wes-c AY
—	6	4	Handle with Care.....dr AYC
1	5	1	Harry Black and the Tiger (British).....mel-c A
—	9	2	Haunted Strangler, The (British).....cri-mel A
—	5	2	Hell Drivers (British).....mel A
—	6	4	Hell's Five Hours.....mys-mel AY
—	4	6	High Flight (British).....war-dr AYC

A	B	C	
—	3	15	High School Confidential..... <i>soc-mel A</i>
—	3	1	High School Hellcats..... <i>mel A</i>
—	3	4	Hong Kong Affair..... <i>mys-mel AYC</i>
2	8	2	Horror of Dracula (British)..... <i>mel-c A</i>
—	2	1	Horse and Carriage, The (Greek)..... <i>dr A</i>
—	3	1	Horse's Mouth, The (British)..... <i>com-c AY</i>
—	4	3	Hot Car Girl..... <i>soc-mel A</i>
—	2	2	Hot Rod Gang..... <i>mel A</i>
1	6	7	Hot Spell..... <i>dr A</i>
—	4	—	Houseboat..... <i>com-c A</i>
—	9	5	Hunters, The..... <i>war-dr-c AY</i>
—	2	3	I Bury the Living..... <i>mys-mel A</i>
—	6	3	I Married a Woman..... <i>com AY</i>
1	11	3	Imitation General..... <i>war-com AY</i>
—	1	2	In the Money..... <i>com AY</i>
2	14	1	Indiscreet..... <i>com-c A</i>
—	2	6	Island Women..... <i>mus-mel A</i>
—	2	3	It! The Terror from Beyond Space..... <i>sci AY</i>
2	7	1	Kathy O'..... <i>com-c A</i>
2	11	5	Key, The..... <i>war-mel A</i>
—	9	6	King Creole..... <i>mus-mel A</i>
1	10	7	Kings Go Forth..... <i>war-dr AY</i>
—	10	5	La Parisienne (French)..... <i>com-c A</i>
—	7	3	Last of the Fast Guns, The..... <i>wes-c AYC</i>
—	6	1	Law and Disorder (British)..... <i>cri-com A</i>
1	9	6	Law and Jake Wade, The..... <i>wes-c AYC</i>
—	5	8	Left Handed Gun, The..... <i>wes A</i>
—	4	4	Let's Rock..... <i>mus-com AYC</i>
—	5	4	Life Begins at 17..... <i>dr A</i>
—	12	4	Light in the Forest, The..... <i>hist-dr-c AYC</i>
—	1	2	Lily of the Harbor (Greek)..... <i>dr A</i>
—	7	2	Lineup, The..... <i>cri-mel AY</i>
—	4	1	Littlest Hobo, The..... <i>dr AYC</i>
—	10	—	Live Fast, Die Young..... <i>cri-mel A</i>
—	8	1	Lone Ranger and the City of Lost Gold, The..... <i>wes-c AYC</i>
—	2	1	Lovers and Thieves (French)..... <i>cri-dr A</i>
—	3	4	Lucky Jim (British)..... <i>com AY</i>
—	4	4	Machine Gun Kelly..... <i>cri-mel A</i>
—	1	9	Mam'zelle Pigalle (French)..... <i>com-c A</i>
—	5	4	Man in the Raincoat, The (French)..... <i>cri-com A</i>
—	2	2	Man of the West..... <i>mel-c A</i>
—	4	6	Manhunt in the Jungle..... <i>doc-c AY</i>
—	8	2	Maracaibo..... <i>mel-c A</i>
4	10	3	Matchmaker, The..... <i>com AY</i>
1	8	4	Me and the Colonel..... <i>war-com A</i>
—	6	4	Mitsou (French)..... <i>com-c A</i>
—	5	9	Naked and the Dead, The..... <i>war-dr-c AY</i>
—	11	5	Naked Earth, The (British)..... <i>mel A</i>
—	4	3	Never Love a Stranger..... <i>mel A</i>
—	7	3	Night Ambush (British)..... <i>war-mel AY</i>
—	—	4	Night Heaven Fell, The (French)..... <i>mys-mel-c A</i>
—	—	4	Night of the Demon (British)..... <i>mys-mel A</i>
—	2	6	No Sun in Venice (French)..... <i>mel-c A</i>
1	12	3	No Time for Sergeants..... <i>war-com AYC</i>
—	—	4	Notorious Mr. Monks, The..... <i>mel A</i>
4	2	3	Old Man and the Sea, The..... <i>dr-c AY</i>
—	2	5	Once Upon a Horse..... <i>wes-com AY</i>
—	8	3	One that Got Away, The (British)..... <i>war-dr AY</i>
—	1	2	Pagans, The (Italian)..... <i>hist-mel A</i>
—	3	2	Party Crashers, The..... <i>mel AY</i>
2	2	1	Pather Panchali (India)..... <i>dr AY</i>
—	4	4	Poor but Beautiful (Italian)..... <i>com A</i>
—	3	1	Premier May (French)..... <i>dr AY</i>
4	9	2	Proud Rebel, The..... <i>dr-c AYC</i>
—	5	2	Quattrini's Raiders..... <i>wes-c AYC</i>
—	4	1	Queen of Outer Space..... <i>sci-c A</i>

A	B	C	
—	3	5	Raw Wind in Eden..... <i>mel-c A</i>
—	2	1	Rawhide Trail, The..... <i>wes-mel AYC</i>
3	9	2	Reluctant Debutante, The..... <i>com-c AY</i>
—	6	3	Return of Dracula, The..... <i>mel A</i>
—	5	4	Revenge of Frankenstein, The (British)..... <i>sci-mel-c AY</i>
—	6	1	Ride a Crooked Trail..... <i>wes-c AY</i>
—	6	—	Robbery Under Arms (British)..... <i>mel-c AY</i>
—	10	3	Rock-a-bye Baby..... <i>mus-com-c AYC</i>
—	9	4	Rooney (Irish)..... <i>com A</i>
2	7	2	Rouge et Noir (French)..... <i>dr-c A</i>
1	11	4	Run Silent, Run Deep..... <i>war-dr AYC</i>
—	4	3	Rx Murder (British)..... <i>mys-mel A</i>
—	—	3	Sabu and the Magic Ring..... <i>adv AYC</i>
—	6	1	Saga of Hemp Brown, The..... <i>wes-mel-c AYC</i>
—	—	3	Secret Place, The (British)..... <i>cri-mel A</i>
—	—	3	Seven Guns to Mesa..... <i>wes A</i>
—	—	3	She Demons..... <i>sci-mel A</i>
—	3	2	She Played with Fire (British)..... <i>mys-mel A</i>
5	10	—	Sheepman, The..... <i>wes-c AYC</i>
—	6	2	Showdown at Boot Hill..... <i>wes AY</i>
—	8	2	Sierra Baron..... <i>wes-mel-c AYC</i>
—	3	1	Smiley Gets a Gun (British)..... <i>mel-c AYC</i>
1	8	3	Snorkel, The (British)..... <i>cri-mel AY</i>
—	4	1	Sorcerer's Village, The..... <i>doc-c A</i>
4	7	4	South Seas Adventure..... <i>trav-c AYC</i>
—	5	4	Space Children, The..... <i>sci AYC</i>
—	4	4	Space Master X7..... <i>sci AY</i>
—	2	5	Spy in the Sky..... <i>mys-mel AYC</i>
—	6	9	St. Louis Blues..... <i>mus-biog AYC</i>
—	4	1	Step Down to Terror..... <i>cri-mel AY</i>
—	2	4	Suicide Battalion..... <i>war-mel AY</i>
2	7	6	Tale of Two Cities, A (British)..... <i>nov AYC</i>
—	6	5	Tank Force (British)..... <i>war-mel-c AYC</i>
—	4	5	Tarzan's Fight for Life..... <i>adv-c AYC</i>
—	2	1	Teenage Caveman..... <i>fan AY</i>
5	5	7	Ten North Frederick..... <i>dr A</i>
—	2	3	Terror in a Texas Town..... <i>wes A</i>
—	4	3	There's Always a Price Tag (French)..... <i>mys-mel A</i>
—	3	7	Thing That Couldn't Die, The..... <i>cri-mel A</i>
—	6	7	This Angry Age..... <i>dr-c A</i>
—	4	5	Thunder Road..... <i>cri-mel A</i>
—	4	4	Thundering Jets..... <i>war-dr AYC</i>
3	8	7	Time to Love and a Time to Die, A..... <i>war-dr-c A</i>
—	4	8	Too Much, Too Soon..... <i>biog A</i>
—	3	4	Toughest Gun in Tombstone..... <i>wes AYC</i>
—	4	2	Truth About Women, The (British)..... <i>com-c A</i>
1	4	7	Twilight for the Gods..... <i>dr-c A</i>
—	6	4	Uncle Vanya..... <i>dr A</i>
3	8	6	Vertigo..... <i>mys-mel-c AY</i>
—	—	5	Vicious Breed, The (Swedish)..... <i>soc-mel A</i>
—	—	3	Viking Women and the Sea Serpent..... <i>adv AY</i>
3	8	7	Vikings, The..... <i>hist-dr-c A</i>
—	5	—	Villa!..... <i>biog-c AY</i>
—	4	6	Violent Road..... <i>mel AY</i>
—	9	1	Voice in the Mirror..... <i>soc-dr AY</i>
—	3	2	War of the Colossal Beast..... <i>sci-mel AY</i>
—	1	6	War of the Satellites..... <i>sci AY</i>
8	7	—	White Wilderness..... <i>doc-c AYC</i>
—	6	2	Whole Truth, The (British)..... <i>cri-mel AY</i>
—	2	2	Wife for a Night (Italian)..... <i>mus-dr A</i>
—	7	1	Wild Heritage..... <i>wes-c AYC</i>
—	6	7	Wind Across the Everglades..... <i>mel-c A</i>
9	2	1	Windjammer..... <i>trav-c AYC</i>
—	4	4	Wink of an Eye..... <i>mys-mel A</i>
—	1	6	Wolf Dog..... <i>mel AYC</i>
—	9	2	Your Past Is Showing (British)..... <i>com AT</i>

The Consumers' Observation Post

(Continued from page 4)

THE HOME HOBBY of cutting out Christmas decorations from "Styrofoam" involves some hazard to health if a hot instrument is used. The fumes and vapors are dangerous to breathe, and children should never be permitted to work on such materials without close supervision, according to Occupational Health Newsletter. There are some problems to be considered in shaping any kind of plastic toys with a hot knife. So many different types of plastic are used in toys that it is difficult to be specific, but the application of heat to plastics may in some cases release toxic materials such as acrolein and other aldehydes. Typical symptoms from this type of exposure are excessive irritation of the eyes, mucous membranes, and respiratory tract.

* * *

FELTS IN PIANOS are often a source of infestation by clothes moths and carpet beetles. The National Pest Control Association reports that about 75 percent of pianos in use, according to one study, show evidence of infestation by fabric pests. Since a piano is a delicate and complicated instrument, the Association recommends securing an expert from the Piano Technicians Guild to deal with the infestation rather than to apply insecticides on the "do-it-yourself" basis.

* * *

LOSS OF A TOOTH may cause malocclusion, the failure of the upper and lower teeth to come into contact properly. Dr. Walter A. Hall, Jr., of the Loyola University School of Dentistry, New Orleans, urges prompt replacement of a missing tooth to keep the rest of the teeth in the mouth intact, for the uneven pressure resulting from absence of a tooth may cause gum tissues to break down.

* * *

CHECK YOUR BATTERY GUARANTEES before using any additive or special electrolyte. The American Automobile Association points out that battery warranties may contain the provision that: "The addition of any chemical or solution other than approved water or battery grade sulfuric acid of proper specific gravity voids the guarantee." You have only yourself to blame if you overlook this important limitation.

* * *

DRY SKIN is very common during the winter because of the low humidity out of doors and poor circulation caused by cold weather. Too frequent bathing, excessive contact with alkaline soaps and detergents, alkaline municipal water, and astringent cosmetics are frequent causes, according to Dr. Norman Tobias of St. Louis, Missouri. Skin dryness may vary from a slight uncomfortable sensation to roughness and harshness with excessive scaling of the scalp, hangnails, and other involvement of the nails and finger tips. Dr. Tobias recommends that people with extremely dry skin should limit bathing to sponge baths and apply an oily lotion immediately after bathing. His recommended treatment for fissures in the heels consists of a 2 percent salicylic acid in Diachylon ointment. For dry and brittle nails he recommends application of castor oil.

* * *

THE RELATIONSHIP BETWEEN THE KIND and amount of fat consumed and the incidence of arteriosclerosis continues to be discussed. In the American Journal of Clinical Nutrition, Dr. William Dock of New York City points out that recent immigrants to Israel from Yemen who stick to their traditional diet of bread, vegetables, and vegetable oil in which fat, mostly olive and seed oil, furnishes less than 18 percent of their caloric intake showed a death rate from arteriosclerosis below 5 per 10,000. On the other hand, male Yemenites who have lived in Israel and Palestine for 20 years or more on less restricted diets, with 21 percent of calories derived from fat including some dairy products, showed a death rate of 33 per 10,000. European Jewish immigrants show as high as 86 per 10,000 deaths from arteriosclerosis yearly.

FRESHLY CAUGHT FISH may soon be treated with an antibiotic to give it "longer shelf life." The Food and Drug Administration is reported to be studying the effect of small residues of tetracycline remaining in cooked fish on persons known to be hypersensitive to this antibiotic. Studies have shown that the antibiotic is not completely eliminated from fish in cooking as is said to be the case with poultry treated in this fashion. Drug Trade News, which reported the matter, predicts, however, that the Food and Drug Administration will soon set a tolerance permitting a certain amount of tetracycline residue in fish.

* * *

IN BUYING A REFRIGERATOR, it is customary to pay a certain sum for the manufacturer's warranty. For the five-year warranty for Frigidaire the amount is \$5. The General Motors Corporation has endeavored to have this amount deducted before computing the excise tax paid on household appliances, television sets, or automobiles. The U. S. Court of Claims has ruled recently that the company must pay full tax on the sale of its refrigerators, including the warranty charge. The Ford Motor Company, however, has taken an appeal to the Supreme Court, contending that the ruling makes it impossible for a manufacturer to predict the tax consequences of its program for handling possible production defects. The Ford program consists of a 90-day warranty on automobiles and it is the company's policy to pay its dealers' repair or replacement costs within and beyond the 90-day period. Ford Company claims it is entitled to a proportionate refund of the excise tax when the price on which the tax is based is readjusted by the return of a defective part, or by rebate or allowance. The Ford Company contends that the cash payments and cash credits given its dealers for repairs entitle it to refunds on taxes paid when the price on which the tax is based is readjusted.

* * *

IF YOU THINK WOMEN IN THE UNITED STATES have cosmetic troubles, consider the plight of the women in the Soviet Union. According to a UP dispatch, the home hour on a Moscow radio station recommended that the sufferer from dry hair should douse it liberally with sour milk, let it stand for 10 minutes, and then wash it off. For greasy skin, the commentator suggested covering the face with a mixture of grated cucumber and vodka. In this country, no doubt, many will prefer to take cucumber and vodka internally, if at all, the one in salad and the other in a Bloody Mary.

* * *

HARD BEDS WITHOUT PILLOWS are quite satisfactory for normal young children. It is important that the bed should not sag in the middle, comments the British Medical Journal. If the springs sag, a plywood bedboard may be placed between the mattress and the springs (until new springs can be provided). Single pillows or no pillow at all is recommended by the Medical Journal, and a latex foam-rubber pillow may be used if there is any tendency to allergy.

* * *

OLD-FASHIONED PEANUT BUTTER that does not contain hydrogenated peanut oil is apparently a sought-after food. In an earlier Observation Post item on the desirability of avoiding hydrogenated fats, we mentioned Landis peanut butter available in eastern Pennsylvania and we asked for the names of other brands. Subscribers in various parts of the country have reported the following brands of peanut butter free from hydrogenated oil available in their sections: Beverly Hills, Laura Scudders Peanut Butter; Chicago, Hazel Brand and American De Luxe, distributed by National Tea Co.; Cincinnati, Frank's Jumbo Old Fashion Peanut Butter (Frank Tea & Spice Co.); Columbus, Krema (Krema Products Co.); Denver, Toner's; Minneapolis, Fairway (Fairway Foods, Inc., also distributed by Twin Ports Wholesale Grocer Co., Duluth, Minn.) and Hove's Old Style Peanut Butter; New York, Black & Koenig, 52 Dey St.; St. Louis, ground to order by the Cousins Tea and Coffee Co. We shall be glad to continue to publish the names of local brands with no hydrogenated oil as subscribers send them to us.

Phonograph Records

BY WALTER F. GRUENINGER

Please Note: The first symbol applies to quality of interpretation, the second to fidelity of recording.

Bach: *The Six Brandenburg Concertos*. Boston Symphony under Munch. RCA Victor LM 2182 and 2198. \$4.98 each. Bach's finest compositions for orchestra, superbly recorded, and swiftly played by a big group of instrumentalists. Some passages should have been played again—and better. On the whole, a good offering, but not the best the Bostonians can do, and not a replacement for Westminster XWN 2219 if you don't mind a small ensemble, or Bach Guild 540/2 if you would prefer a large one. **A AA**

Bartok: *Concerto for Violin*. Stern with the New York Philharmonic under Bernstein. Columbia ML 5283. \$3.98. Completed in 1938, the work sounds far less revolutionary than it did when first heard, though it is still principally for advanced listeners. Best disk of this composition—and a fine example of rapport between violinist and orchestra. **AA AA**

Beethoven: *Trio in E Flat* (Op. 3). Heifetz, Primrose, Platigorsky (violin, viola, cello). RCA Victor LM 2180. \$4.98. An effective serenade of six movements, the first of four such works Beethoven wrote. The playing is every bit as good as you'd expect from these sterling artists. Recording, a trifle dry. **AA A**

Berlioz: *Requiem*. Orchestre du Théâtre National de l'Opéra, Chorus, Soloists under Scherchen. 4 sides, Westminster XWN 2227. \$7.96. A big scale work that turns up occasionally at religious or concert performances. There's no other recording of it in Schwann's catalog that approaches this in fidelity or in excellence of performance. **AA AA**

Brahms: *Magelone Songs*. Fischer-Dieskau (baritone). Decca DL 9401. \$4.98. Brahms' only song cycle. Though it contains some very fine pieces, as a whole it is not up to the cycles by Schubert, Schumann, and Beethoven, hence it is less often heard. The performance is moving, beautiful, well-nigh perfect. Recording, tops. **AA AA**

Brahms: *Three Intermezzi and Variations and Fugue on a Theme of Handel*. Istomin (piano). Columbia ML 5287. \$3.98. Not the best Brahms playing imaginable. It's thin and lean. Aside from this, the technique is good, the recording transparent. **B AA**

Cherubini: *Medea*. Callas, Picchi, Scotti, Modesti, etc., under Serafin. 6 sides, Mercury OL 3-104. \$14.94. Only recording of this musical drama that some regard as a masterpiece. Callas sings the part of the sorceress, with emphasis on dramatics. Yet the lyric quality is present in abundance when required. Sustained high notes wobble, but it's one of the most effective parts she has presented on disks. The remainder of the cast is satisfactory but not unusual. Serafin's conducting is marvelous. The recording, made with a single stationary mike, conveys depth as in the opera house but, in the overture particularly, it sounds very much like the old Studio H recordings on the poorer Tuscanini disks. **A A**

Grofe: *Grand Canyon Suite*. Philadelphia Orchestra under Ormandy. Columbia ML 5286. \$3.98. Five-movement descriptive suite likely to turn up occasionally at Pop concerts. The interpretation tops all others. . . but there is plenty of blank space for additional music. Fine recording; yet, the tremendous crescendo in the closing measures of the "Sunrise" is stifled here as on all other disks of this suite. **AA A**

Mahler: *Symphony No. 2*. New York Philharmonic under Walter. 4 sides, Columbia M2L 256. \$7.98. For more than 60 years, Bruno Walter has lived with this symphony. There's no finer performance of it on disks. And the fidelity is marvelous. If you like Mahler, this is a must. **AA AA**

Mozart: *Concertos No. 18 and No. 20*. Robert Casadesu (piano) with the Columbia Symphony under Szell. Columbia ML 5276. \$3.98. Two fine works, with No. 20 better described as "great." Casadesu plays lyrically and lightly. His orchestra sounds small and light, too. This

treatment is better in No. 18 than in the dramatic No. 20. Clearly recorded. **A AA**

Rimsky-Korsakov: *Scheherazade*. London Symphony under Monteux. RCA Victor LM 2208. \$4.98. Schwann's catalog already lists 23 performances of this Oriental-flavored piece, but there's none better than this. Monteux steers a middle course, shunning the frenzy as well as "the prolonged phrase." His solo violin is adept and so is his orchestra. Rich recording. **AA AA**

Shostakovich: *Symphony No. 11*. Houston Symphony under Stokowski. 4 sides, Capitol PBR 8448. \$9.96. In his latest symphony Shostakovich says nothing new, but he takes a long time to say it. Stokowski apparently brings out the best in the work, which is sparsely recorded. **AA AA**

After the Theatre at the Little Club. Kurt Maier (piano) and Rhythm Section. Decca DL 8699. \$3.98. A delightful disk. Use it for background music or for more attentive listening. It features the facile piano playing of Kurt Maier who glides through tasteful arrangements of hit tunes from "Kiss Me Kate," "Silk Stockings," "Pal Joey," "South Pacific," and others. Superb recording. **AA AA**

Boston Tea Party. Boston Pops Orchestra under Fiedler. RCA Victor LM 2213. \$4.98. The eight light pieces range from "Merry Wives of Windsor Overture," "Fantasia on Greensleeves," "Count of Luxembourg Waltzes" to "Hernando's Hideaway" and "Bohemian Girl Overture." I have enormous respect for these players and for Fiedler even though the ultimate polish isn't always present. Could that be caused by insufficient rehearsal? Very well recorded. **AA AA**

Dancing Over the Waves. Ray Anthony and His Orchestra. Capitol T 1028. \$3.98. Smoothly flowing, conservative, pleasing arrangements in dance tempo of "This is Our Love Song," "Beautiful Lady," "My Dream of Jeanie," etc. Good background music. **AA AA**

Fire Goddess. Webley Edwards with Al Keoloha Perry. Capitol T 1033. \$3.98. Chants and chant-songs that should appeal to those who like Hawaiian music. Excellent recording. **AA AA**

Hi Fi Adventure in Asia Minor. Marko Meldon and His International Orchestra. Decca DL 9061. \$4.98. Exciting, exotic selections from Armenia, Turkey, Greece, etc. Meldon and his group play night clubs in this country. Well recorded and sensationally played on oriental instruments. **AA AA**

None But the Lonely Heart. Jennie Tourel (mezzo). Decca DL 9981. \$3.98. Russian love songs sung by one who fully understands them and possesses a darkly colored voice made to order for the music. The composers include Tchaikovsky, Rachmaninoff, Glinka, Gretchaninoff, Dargomizky, and others. A highly prized disk. **AA AA**

The Concert-Masters of New York Play Kreisler. Orchestra under Vardi. Decca DL 9986. \$3.98. Though I prefer Kreisler bon-bons played by a solo violin which is how Kreisler intended them to be played, if you don't mind a string orchestra you'll look far to find the equal of this one. Impeccable taste in the performance, which is sparsely recorded. Included are "Liebesfreud," "Liebeslied," "La Gitana," "Schön Rosmarin," and seven other lovely tunes. **AA AA**

The Play of Daniel. New York Pro Musica under Noah Greenberg. Decca DL 9402. \$4.98. Musical drama written by the students of the Cathedral of Beauvais in the 12th century and performed here by such talented singers as Russell Oberlin, Alan Baker, and Betty Wilson. Many ancient instruments add color to the performance. Altogether a stunning disk, obviously the work of dedicated men. Anyone interested in music of this period should, by all means, hear it. The recording is exceptionally fine. **AA AA**

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